

ADMISSION:  
TOUGHER THAN EVER

WHAT IS  
CONSCIOUSNESS?

GRADING-POLICY  
SURVEY

# PRINCETON ALUMNI WEEKLY

A photograph of an elderly woman with white hair and a patterned scarf, and an elderly man with a white beard and a blue checkered shirt, both smiling and looking at each other. They are sitting at a wooden table.

## HOW DARWIN'S FINCHES EVOLVE

For 40 years, Rosemary  
and Peter Grant watched  
natural selection at work

APRIL 23, 2014  
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# ANNUAL GIVING

## *Making a difference*

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“At Princeton, my world view was dramatically expanded through many stimulating classes and enriching friendships. It was a place of inspiration and aspiration. In retrospect, I can appreciate how much my undergraduate experience exploring new ideas, developing new interests, and pursuing new passions prepared me for an unexpected journey from training in architecture and practicing corporate law to a career in the non-profit sector and rediscovering my creative energies as a visual artist.”

— SARA SILL '73



Photo: Denise Applewite

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# PRINCETON ALUMNI WEEKLY

An editorially independent magazine by alumni for alumni since 1900



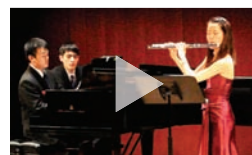
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**Professor Michael Graziano '89 \*96 and his ventriloquism partner, Kevin, page 18**

**In Our Heads** **18** **The People Who Saw Evolution** **22**  
 Professor Michael Graziano '89 \*96 has a new theory about what it means to be conscious. And it all comes down to data-processing. *By Mark F. Bernstein '83*  
 After 40 years, Princeton's Peter and Rosemary Grant have completed their work watching natural selection among Darwin's finches. *By Joel Achenbach '82*

## PAW.PRINCETON.EDU



**Senior Melodies**  
Videographer Ellis Liang '15 highlights students pursuing the musical performance certificate.



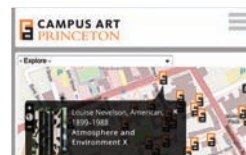
**To the Editor**  
Read a selection of memorable letters published in PAW, on topics ranging from the clubs to coeducation.



**Meet Kevin**  
Professor Michael Graziano '89 \*96 and the illusion of consciousness through ventriloquism.



**Moral Philosophy**  
Wayne Moss '74 examines a once-central part of the curriculum, taught by Witherspoon and McCosh.



**Art-phone**  
Gregg Lange '70 explores campus art collections in a "snazzy 21st-century package."

Top: Peter Murphy; From left: Ellis Liang '15; PAW; Courtesy Michael Graziano '89 \*96; PAW; Princeton University Art Museum

# A Strategic Look into Princeton's Future

Princeton today is a jewel of a university, with talented students, brilliant scholars, a magnificent campus, enthusiastic and dedicated alumni, a commitment to service, and a well-earned global reputation for excellence in teaching and research. A place on this campus is a gift for everyone who receives it. Precisely because the University offers so much, all of us here have a responsibility to ask what Princeton should be tomorrow and how best it can make a difference in the world.

That is why we have begun a strategic planning process that will engage many members of the University community in exploring the evolving needs and challenges facing Princeton. We will create a framework for assessing and prioritizing new initiatives while focusing on key questions about the fundamental elements of the University's mission: world-class teaching and research in the service of the common good.

I embark on this process realizing that on college campuses the mere mention of "strategic planning" can sometimes cause allergic reactions. Collegiate planning can be unduly long and cumbersome, generating voluminous reports that amount more to a "wish list" than a set of strategic choices. Board of Trustees Chair Katie Hall '80 and I spent months discussing strategic planning with several past and present trustees so that we could develop an appropriately nimble and compact process.

Our aim is to work through fall 2015 to generate a revisable framework to guide decision-making by our board and administration over the next five to 10 years. The point of this process will be to articulate values and standards against which to judge proposals that come forward later, not to compile a comprehensive set of recommendations.



DENISE APPLEWHITE

One of the key questions to be explored during Princeton's strategic planning process is how to enable more undergraduates to contribute to the world.

Committees and task forces at the trustee level and on campus will gather data, conduct assessments, and prepare reports to assess the University's current situation and shape our thinking about how to maximize Princeton's resources. What follows are four key questions to be explored:

• **How best can Princeton sustain teaching and research excellence that makes a difference in the world?**

Princeton's most profound contributions to the public good depend upon the knowledge we generate and the leaders we educate. We must ensure that faculty members have the resources needed for research and scholarship of the

highest quality, that graduate students have support that enables them to thrive at Princeton and beyond, and that our curriculum, pedagogy, and residential life prepare our undergraduates for a lifetime of challenges and opportunities.

• **What new academic initiatives should Princeton pursue to address long-term issues of fundamental importance?** Great universities remain vigorous only if they move boldly to address questions that acquire new urgency for their mission. Sometimes — as with neuroscience — that means moving into new fields of knowledge. Sometimes — as with the creative and performing arts — that means embracing questions that are as old as civilization but that have growing relevance to Princeton's role in the world.

• **What must we do to make service central to the mission of the University?** Service, leadership, civic engagement: These concepts have special resonance at Princeton, which has long defined itself partly through President Woodrow Wilson 1879's call to be "in the nation's service" and which at Alumni Day applauded Justice Sonia Sotomayor '76's call to be "in the service of humanity." We must ask both how we can prepare students for careers and lives connected to a larger purpose, and how the University itself can play a leadership role in higher education.

• **How can Princeton enable more undergraduate students to contribute to the world?** We now find ourselves turning down a higher number of qualified applicants than at any time in history. We have a responsibility to ask whether we might be able to say "yes" more often while still preserving Princeton's special characteristics. Adding a few more places to the undergraduate class would also enable us to increase socioeconomic diversity, and to consider taking transfer students and accommodating international exchange students, while maintaining our traditional commitments, including those to the Princeton family.

We are exploring these issues at a time when the landscape for Princeton and for all of higher education is changing rapidly due to evolving issues such as growing economic inequality, globalization, online education, concerns about long-term economic stagnation, and tightening federal research budgets.

My colleagues and I will provide periodic public updates throughout the process and seek feedback continuously. Discussions at the Council for the Princeton University Community and elsewhere have already prompted some refinements to our key questions; I expect that will continue as the process unfolds.

Answering these questions inevitably will entail making difficult choices. With such extraordinarily talented people in the University community, Princeton is capable of accomplishing great things. But we know that, ultimately, we cannot do everything we would like — we must choose our priorities wisely. At a time when Princeton's contributions to the world are both profoundly important and intensely scrutinized, we have an obligation to be as thoughtful as possible about the path we take.

# Inbox

## ROTC AT PRINCETON

I found President Eisgruber '83's piece (President's Page, March 19) about ROTC at Princeton to be thoughtful and refreshing. During the general period that ROTC and Princeton were parting ways, the secretary of defense, the secretary of the Army, the undersecretary of the Army (myself), the deputy undersecretary of the Army, and two of the Army's 10 four-star generals held Princeton degrees. It was a particularly difficult era for everyone, one in which the public seemed to blame our soldiers for America's involvement in the Vietnam War — a view that seems to have been totally reversed today. That is good news.

**Norm Augustine '57 \*59**  
*Potomac, Md.*

I was very pleased to see President Eisgruber's support for the ROTC program. After World War II, from which I returned as a private first class, I decided that in another conflict I should be commissioned. So about 10 of us veterans signed up for ROTC (I was cadet commander) and were commissioned in 1948. Since then I have been on the ROTC board and had the honor of addressing the newly commissioned officers in 1997. The president's endorsement of the ROTC program and the restoration of NROTC (On the Campus, March 19) together show a new awakening and awareness of the importance of military service on Princeton's part and go even further in support of our motto, "Princeton in the nation's service and in the service of all

nations." Congratulations, President Eisgruber, for this sterling initiative!

**Alan W. Lukens '46**  
*Chevy Chase, Md.*

## I have long believed that NROTC is the best path to a Navy commission.

I am delighted that NROTC is returning to Princeton, reversing the grievous mistake the faculty made when they banned ROTC units during the Vietnam War to prove they were good antiwar liberals. I am sorry to see that it is only half a program, and that midshipmen and midshipwomen will have to be bused to Rutgers for their drills and lectures.

I have long believed that NROTC is the best path to a Navy commission. It is important to have broadly educated officers who know more than ships and airplanes. The Naval Academy is too restricted, immersing the middies in a subculture filled with other officer aspirants for four years, then ejecting them into the Fleet, totally estranged from the citizen-sailors they are expected to lead.

My own commission was from Officer Candidate School at Newport, R.I.; it then took another 18 months of on-the-job training (OJT) to teach us all the things we didn't know. NROTC produces a young officer who is qualified to do the job he is required to do. I managed to survive my OJT, and eventually retired as a captain. My oldest son was commissioned through NROTC, graduated Tau Beta Pi (engineering honor society), qualified in nuclear

## WE'D LIKE TO HEAR FROM YOU

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*Letters should not exceed 275 words and may be edited for length, accuracy, clarity, and civility. Due to space limitations, we are unable to publish all letters received in the print magazine. Letters, articles, photos, and comments submitted to PAW may be published in print, electronic, or other forms.*

## CATCHING UP @ PAW ONLINE



Have you ever wondered what Class Notes looked like when PAW began publishing in 1900? On April 7, PAW's 114th birthday, we posted the entire first issue, including notes

that reported on Booth Tarkington 1893's latest book and the military exploits of future Medal of Honor recipient Lt. Gordon Johnston 1896. Volume 1, Issue 1 also outlined the magazine's mission and shared the latest news. To read more, visit [paw.princeton.edu](http://paw.princeton.edu).

submarines, and has just retired as a commander. He was a far better naval officer than I, for having taken the NROTC path.

My compliments to Princeton for this small step in the right direction.

**Burr Loomis '61**  
*Retired Captain, U.S. Navy Reserve Chambersburg, Pa.*

"Naval ROTC to Return" notes that efforts to bring ROTC back to the Ivy League "accelerated after the Pentagon dropped its 'don't ask, don't tell' policy banning openly gay service members in September 2011." "Don't ask, don't tell" was not "Pentagon policy." It was U.S. law, passed by a Democratic Congress and signed by President Bill Clinton in 1993. It ceased to be law by the subsequent act of a Democratic Congress in 2011, signed by President Barack Obama.

The 1993 law reflected the national consensus prevailing at the time, as did the 2011 legislation. Removing the ban was the result of an evolution in American social attitudes reflected in legislation, not unilateral action by the Defense Department.

**Paul C. Atkinson '74**  
*Pleasantville, N.Y.*

## FIGHTING RABIES

Even though rabies infection in humans in the United States is rare (cover story,

# PRINCETON ALUMNI WEEKLY

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## Inbox

March 5), it is not a matter of curiosity simply because of its deadline. In my 13-plus years as a veterinarian, I administered thousands of rabies vaccines; vaccination of domestic animals in the U.S. has been a huge success in the prevention of both pet and human rabies. Because most human rabies infections in the U.S. now come from wild animals, initiatives in preventing rabies in wildlife deserve mention: Here on Cape Cod, a program of distributing oral rabies-vaccine baits along the Cape Cod Canal (which separates Cape Cod from the rest of Massachusetts) was successful from 1994 to 2004 in keeping the Cape free of raccoon rabies.

In 2012, a man who lived near me died of a rabies infection acquired from a bat — the first confirmed human case of rabies in Massachusetts in more than 75 years. (In 1983, a man died of rabies in Waltham, but he was infected by a dog bite while in Africa.) On the one hand, the extremely low rate of human rabies fatalities in my home state is reassuring. On the other hand, since 10 percent of samples from terrestrial wildlife (mostly raccoons, foxes, and skunks) and 4 percent of samples from bats that were sent to the state lab from 1992 to 2013 tested positive for rabies, the potential for human exposure exists. My advice: If bitten by a suspected rabid animal, get treatment immediately! And personally, if it came to that, I would want to try Rodney Willoughby '77's protocol — even though it has a low success rate, odds for survival seem better than for any other available alternative.

**Angela Hahn '85**  
**Cotuit, Mass.**



**Willoughby '77**

Thank you for the story about Dr. Rodney Willoughby and his miraculous cure for rabies. During a recent medical school lecture on "Viral Infections of the Central Nervous System," my professor made passing reference to a single case of rabies from which a patient survived "a few years

ago." Because it struck me as odd that only a single case had ever been treated successfully, I made a mental note to look up what treatment modalities the physicians had employed. Before I even had a chance to start browsing the literature that night, I noticed the solution to my curiosity was on the cover of the PAW!

I enjoyed reading the personal story of the Princetonian involved in the case rather than the typical, sterile journals I normally would have consulted.

**Jack Squiers '12**  
**Dallas, Texas**

## CIVIL WAR PHOTOS

As a Master Ranger Corps volunteer at Antietam National Battlefield, I was delighted to learn that Princeton's collections encompass one of the few copies of Alexander Gardner's *Sketch Book*, plus photographs contributed by Gen. George McClellan's namesake and only son (feature, March 19). Mathew Brady's New York exhibit of the extraordinary Antietam images taken by Gardner (and James F. Gibson) is arguably where modern photojournalism began.

One correction to this fine article: The battlefield is 64 miles (not 25) from Washington, D.C., as a quick check with Professor Emeritus James McPherson, a welcome and frequent visitor to Sharpsburg, Md., would have revealed.

**Frank E. Bell III '68**  
**Middletown, Md.**

## A MORAL INSTITUTION

Re "Dangerous Business" (On the Campus, Feb. 5): A boycott of Israeli academics might well be premature at this time. But if the European economic and U.N. pressure on Israel has no effect, then such a boycott by universities will become a moral obligation. Why? For the reason that universities exist within society. Universities teach young people. For both these reasons, a university is a moral institution. The PAW account implies that, somehow, academics live in a moral vacuum, to be protected from the ugly facts of reality. Thank goodness that students, also part of academia, have immediately understood otherwise, as their anti-Vietnam protests made clear in the 1960s and '70s. The

justification offered against a boycott is “academic engagement” or freedom of speech, but what it amounts to, on a practical level, is making addressing the Israeli problem a taboo subject. William Bowen ’58’s quotation that “the consequences for institutions are just too serious” may reveal a more venal motivation; that is, that Princeton should not become involved because it might offend donors.

**L.V. Watrous ’66**  
**Professor of visual studies**  
**University at Buffalo**

### FACES OF EXCELLENCE

I read with amusement — and a certain degree of horror — the responses by Steve Wunsch ’69 and Charles Hohenberg ’62 (Inbox, Feb. 5) to “Passing the Torch” (feature, Dec. 4). I mean no disrespect for the authors when I say that I found their opinions both retrograde and naive. This isn’t the space for a sociological lecture, so I won’t cite the vast amounts of research on how structural inequalities and the ugly legacies of institutionalized racism and sexism still pervade the selection and shaping of student and faculty pools at every level. This same research (some of which has been undertaken by Princeton’s finest — e.g. the seminal paper co-authored by Cecilia Rouse, now dean of the Woodrow Wilson School, on the importance of blind auditions for the hiring of female musicians by symphony orchestras) also has underlined the continuing urgency of devising protocols to ensure that the hidden and not-so-hidden biases capable of insinuating themselves into the assessment and recruitment of talent are mitigated as best as possible.

The desire for more “balance” is not a fetish; rather it is an acknowledgment that talent and (real as well as potential) achievement are distributed across race, class, and gender lines much more proportionately than Princeton’s student and faculty composition of the ’60s or even ’00s might lead the casual observer to believe. Princeton has come far in recognizing and valuing the many faces of excellence — but there is still much more work to be done.

**Dan-el Padilla Peralta ’06**  
**Union City, N.J.**

FROM THE EDITOR

## A Love of Letters

Somewhere in a bin in my closet is a handwritten letter from my father, mailed to my first apartment in the first days of my first job, compressing 22 years of parenting into five packed pages. The bin also holds featherweight aerogrammes from friends made during a semester abroad, each covered by tiny writing about outings and romances, religion and great plans. And I find the breakup letter from my college boyfriend, an architecture student who wrote every character artfully, with precision and clarity. Each letter unpacks feelings in a way the endless emails left on my computer never will.

Someone who wants to understand Princeton and its graduates might read the letters sent to PAW over the years: about manners, culture, racial integration, coeducation, sports, politics, and much more. (Read a sampling of historical letters at [paw.princeton.edu](http://paw.princeton.edu).) These days letters are being replaced by comments — some of them hurried — posted at PAW Online.

I have been thinking of the power of letters since receiving a poignant new book by Nina Sankovitch, *Signed, Sealed, Delivered: Celebrating the Joys of Letter Writing*. Sankovitch wrote her book after buying an old home in New York City and discovering a chest containing letters that James Seligman 1912 penned to his mother while on campus. She is planning to donate the letters to Princeton.

“I am getting a good college education, developing like a film, apologizing to the grass every time I step on it, scrambling like an egg, yelling like a bear, telling the upperclassmen to go to @\$% ...,” young Seligman wrote. And: “Chapel was great. I never laughed so much in my life.” Letters like that tell the story of a young man, and of Princeton, as few things can.

*Mary Maltz*





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## Inbox

### REMEMBERING THE IVJB

In his March 5 letter, Stu Hibben '48 mentions the Intensely Vigorous Jazz Band (IVJB) coming on the field ahead of the marching band at football games during the late 1940s to warm up the crowd.

As a clarinetist in the marching band from 1947 through 1949, I remember no such activity. In fact, that would have been impossible since the IVJB used both a piano (Hal Cabot '51) and a full drum set (for sit-down drummer Stan Bergen '51). The other instruments were a trombone, cornet, and clarinet. The last was played by Ad Ward '51.

Both John Dengler '48, the leader and cornetist, and Marty Ill '51, the trombonist, played in the marching band. Although Dengler was '48, he had been in the service during World War II and became a classmate of those in '51. It was he who organized the IVJB in 1948.

At any rate, Hibben is right when he says the IVJB was great fun. I knew



The cover of the Intensely Vigorous Jazz Band's first record album.

them all, and when '51 graduated, the IVJB was no more.

Some facts about the three surviving members: Bergen became a doctor affiliated with the Army for 13 years, taught at Columbia, was the first president of the College of Medicine and Dentistry of New Jersey, led development of Robert Wood Johnson

Medical School in New Jersey, and received an honorary degree from Princeton. Cabot went into advertising, then banking, became a bank CEO, flew his own plane, and continued to play piano with Dixieland bands. Ill went to medical school, joined the Army, became president of the Bristol (Conn.) Symphony, and once sang with the Hartford Chorale under Robert Shaw.

**Dick Snedeker '51**  
**West Windsor, N.J.**

*Editor's note: According to Snedeker, an IVJB original song called "Let Me Overhaul Your Car" was a campus favorite. You can hear it at [paw.princeton.edu](http://paw.princeton.edu).*

### FOR THE RECORD

A memorial for John H. Williams Jr. '48 in the March 19 issue contained several errors. A corrected version appears in this issue.

Each story, letter, and memorial at [paw.princeton.edu](http://paw.princeton.edu) offers a chance to comment.

Courtesy Dick Snedeker '51

# Fragrance-Free Workplaces?

**In the 1960s few would have believed that smoke-free workplaces would before long become the norm. Could fragrance-free workplaces be the wave of the future?**

A CDC policy bans the use of air fresheners and scented candles in every CDC facility in the country. This policy states: "The use of some products with fragrance may be detrimental to the health of workers with chemical sensitivities, allergies, asthma, and chronic headaches/migraines."

The full CDC policy can be viewed on the website of the Chemical Sensitivity Foundation, which contains information about multiple chemical sensitivity (MCS), including a research bibliography. Individuals with MCS react not only to fragrances but also to substances such as cleaning products, pesticides, diesel exhaust, air fresheners, fabric softeners, and new carpet. Symptoms can include asthma attacks, sinusitis, headaches, skin rashes, irritable bowel symptoms, fatigue, and difficulty with concentration, memory, and cognition.

To learn more, play on YouTube the video "**Multiple Chemical Sensitivity: A Life-Altering Condition**," which contains footage of interviews with four leading members of Congress and a former Commander of Walter Reed Army Medical Center.

[www.ChemicalSensitivityFoundation.org](http://www.ChemicalSensitivityFoundation.org)



# On the Campus



Designed to inspire, Firestone Library's new third-floor reading room displays portraits documenting Princeton's early history and a tapestry by American artist John Nava.  
*Photograph by Ricardo Barros*

# Are Grades Too High?

## Alumni views on decade-long policy sought as A's soar across the country

**A**s a faculty committee continues its review of the University's grading policy, alumni and others in the Princeton community can weigh in on the issue in an online survey through the end of May.

The committee has surveyed students and faculty as part of its charge to review the effectiveness and "unintended impacts" of Princeton's 10-year-old policy aimed at curbing grade inflation. The group also is gathering data on graduates' success rates in graduate and professional schools, ROTC placement, and competitiveness for Rhodes and Marshall scholarships, said Clarence Rowley '95, a professor of mechanical and aerospace engineering and the committee's chair.

Alumni feedback will help identify impacts of the policy on graduates' career and educational opportunities, said Elizabeth Colagiuri, associate dean of the college. She said the committee is particularly interested in responses from alumni who were on campus after the guidelines were implemented and who can speak to how the policy affected their lives on both sides of FitzRandolph Gate. (The survey can be found at [www.princeton.edu/gradingsurvey/](http://www.princeton.edu/gradingsurvey/).)

Grade inflation has long been a

vexing problem across higher education. A study by Stuart Rojstaczer and Christopher Healy of grading data from 200 four-year colleges and universities from 1940 to 2009 found that A's represent 43 percent of all letter grades on college campuses, up from 15 percent in 1960 and 31 percent in 1988. The total of D's and F's, meanwhile, has decreased to less than 10 percent.

Grades skew higher at private institutions than at public schools with equal student selectivity, the study showed, with A's and B's accounting for 86 percent of all grades at private schools, compared with 73 percent at public universities. The study also found that Southern colleges grade more harshly than schools in other regions, and that science and engineering schools tend to have lower GPAs than institutions that emphasize the liberal arts.

The authors attribute the steep rise in grades to a shift in academic culture toward treating students as consumers. Rojstaczer, a former Duke geophysics professor who maintains the site [gradeinflation.com](http://gradeinflation.com), said the trend has not been accompanied by increasing student achievement, noting findings that students today spend fewer hours

studying than previous generations did.

Such top-heavy grading makes it difficult to communicate to students how well they're performing and disadvantages top students by failing to reward truly outstanding work, said Richard Kamber, a philosophy professor at the College of New Jersey who has written about grade inflation.

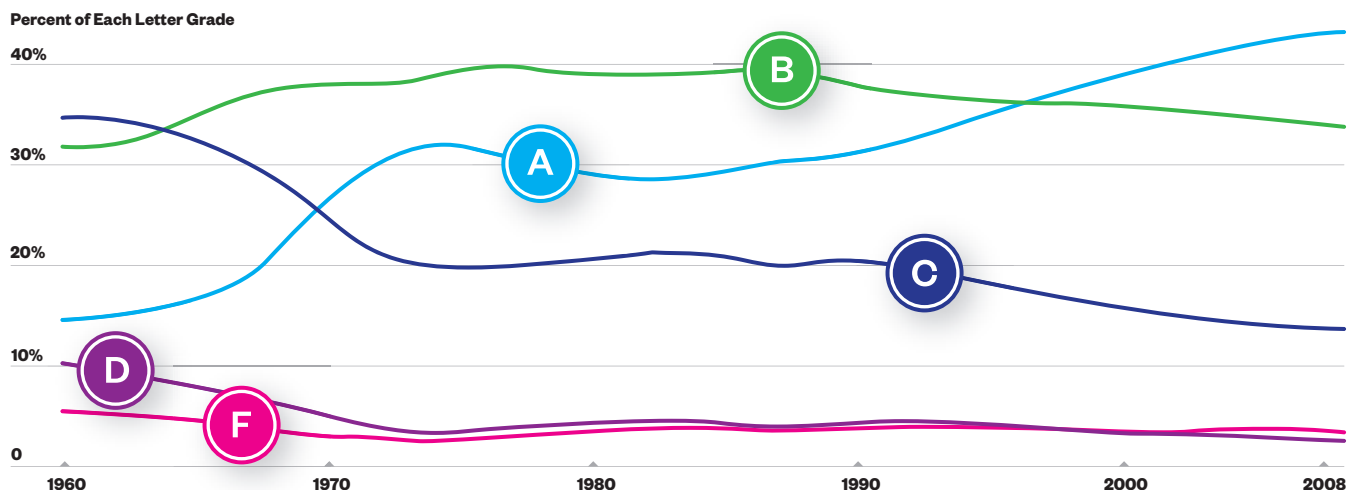
At Harvard University, where the most commonly awarded grade is an A, Harvey Mansfield, a professor of government, gives students two grades: one he feels they deserve, and another that appears on their transcripts.

Grade inflation also can make grades less useful to others. When employers see A's from institutions where A's are common, said Sita Slavov, an economist at the American Enterprise Institute, "what can they say about you except that you're average?"

Many take different grading scales in stride. Law schools, for example, often employ algorithms based on colleges' grading histories to compare applicants. Ernst & Young uses the performance of past cohorts of hires to gauge institutions' grading curves and how well prepared their graduates are, said Dan Black, the company's director of recruiting for the Americas. Princeton students, he noted, benefit from the University's reputation for academic excellence. "That is a fact that is not lost on any recruiter who knows his or her business," he said.

Although Princeton is still shy of its target — limiting A's to no more than 35

### Grading Nationwide: A Surge in A's



Source: "Where A Is Ordinary: The Evolution of American College and University Grading, 1940–2009" by Stuart Rojstaczer and Christopher Healy (2012)

**“If you give everybody A’s, there’s no incentive to actually study a subject and get immersed in it and learn to love it. But if you are too strict ... you’re also not doing the best thing.”**

— Professor Clarence Rowley '95

percent of undergraduate grades — the policy has reduced the percentage of A grades from 47 percent in 2001–04 to 41.8 percent in 2010–13. Few institutions, however, have followed suit.

In 2004, Wellesley College adopted guidelines setting the expectation that the mean grade for 100- and 200-level classes with more than 10 students should not exceed a 3.3 or B+. The guidelines “preserved the credibility of every Wellesley transcript,” said provost Andrew Shennan, by lowering the mean grade from 3.53 in 2001 to 3.34 in 2011 and reducing grading imbalances between the sciences and humanities. Shennan said the policy hasn’t appeared to hinder post-baccalaureate success, noting positive feedback from fellowship and grad-school selection committees, but student anxiety persists.

At Yale University, where 62 percent of the grades in 2012 were A’s, an ad hoc committee has proposed guidelines similar to Princeton’s, limiting the distribution of A’s in a class to 35 percent. Winning backing for the proposal likely will be considerably more difficult if Princeton reverses course, said Ray Fair, an economics professor who chaired Yale’s committee.

Though it’s too early to say whether the committee evaluating Princeton’s guidelines will recommend adjustments when it issues its report this summer, “we’re considering everything,” Rowley said.

“We want to do what’s best for our students,” he said. “If you give everybody A’s, there’s no incentive to actually study a subject and get immersed in it and learn to love it. But if you’re too strict and students feel they’re in competition or you’re penalizing them and making it more difficult for them to get into graduate school, you’re also not doing the best thing.” ♦ *By Paula Wasley '97*



IN '46, CREATING A BEST-SELLER

## Pocahontas in Princeton

Jamestown, Va., marked the 400th anniversary this month of the marriage of Pocahontas to English settler John Rolfe. At Princeton, Cotsen Children’s Library holds a spectacular collection related to this classic story: a stash of original notes and drawings for Ingri and Edgar Parin d’Aulaire’s 1946 best-seller, *Pocahontas*.

At their stone studio on a farm in Connecticut, the D’Aulaires wrote and drew the pictures for scores of popular books — most famously *D’Aulaires’ Book of Greek Myths*, on which they were assisted by their son, Per Ola d’Aulaire ’61.

*Pocahontas* involved months of research, the meticulous design in pencil of every page, and finally the creation of four-color lithographs drawn on Bavarian limestone. Artists in Paris before immigrating to America, the D’Aulaires took no shortcuts.

And they stressed truthfulness, once telling an interviewer that *Pocahontas* came under fire for showing Jamestown colonists ogling the Indian maidens while they danced: “Facts are facts, and you can’t suppress them.” ♦ *By W. Barksdale Maynard '88*

## ADMITTING THE CLASS OF '18

The University extended offers of admission to **1,939 APPLICANTS** for the Class of 2018, **7.28 percent** of the **26,641** who applied. The acceptance rate is a record low by the smallest of margins — last year’s rate was **7.29 percent**.

Of those offered admission, **48.4 percent** are women; **11.4**

**percent** are international students; **49.2 percent** of U.S. students self-identified as racial or ethnic minorities; **61 percent** are from public schools; **13.8 percent** are the first in their families to attend college; and **9.4 percent** are legacies. About **37 percent** — **714 students** — were admitted through early action.

# Greening Princeton: A Midterm Report

## University says it expects to meet sustainability goals

In February 2008, Princeton University adopted an ambitious set of environmental goals for 2020. Envisioning the campus as a “living laboratory” for research by students and faculty, the sustainability plan included targets for reducing greenhouse-gas emissions, commuter vehicles, and water use and for increasing sustainable food purchases, recycling, and related academic and civic work.

Today, halfway to 2020, officials say that the University is on track to meet its goals and even exceed them. (See accompanying graphic.) “I think we’re making great progress — in some cases a little bit more than we hoped for, in others we’re right on target,” said Michael McKay, vice president for facilities. Of the \$45 million expected



A single-stream recycling program developed by Misha Semenov '15 and Olivia Howard '15 is being rolled out across campus.

to be spent on energy-saving projects between 2009 and 2017, the University has committed \$23 million.

Perhaps the most ambitious goal was to reduce emissions by 18 percent without the use of offsets (purchases of reductions elsewhere), even as the

University continued to add campus buildings. McKay recalled that the original plan could not account for how to accomplish a quarter of the emissions reduction, instead presuming that “technology would change or new opportunities would arise that we

## Halfway to 2020, Progress in ‘Going Green’



**8%**

**fewer CO<sub>2</sub> emissions since 2008 (decline of 9,500 metric tons)**  
GOAL: 18% reduction by 2020



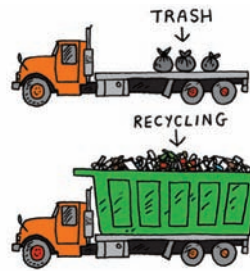
**9%**

**fewer commuter cars since 2008 (decrease of 452)**  
GOAL: 15% reduction by 2020



**22%**

**less overall campus water use since 2006 (decrease of 54 million gallons)**  
GOAL: 25% reduction by 2020



**25%**

**less campus waste per capita since 2006 (reduction of 214 lbs. per capita)**  
GOAL: 40% reduction per capita by 2020



**67%**

**of food purchased in 2013 was sustainably produced, up from 36% in 2007**  
GOAL: 75% of all food purchases by 2015



**Theodore Eyster '13 and Sophie Tyack '13 conducted summer research in the stream along Washington Road.**

couldn't anticipate." Since then, McKay said, the gap has closed considerably: The means to achieve just 4 percent of the goal remains unaccounted for.

At the same time, the sustainability plan has underscored the University's research into energy and climate issues and its cultivation of environmental leaders. A one-month pilot study to test the impact of consolidating campus recycling — paper, plastic, glass, aluminum — in a single bin was developed by Misha Semenov '15 and Olivia Howard '15, the coordinator of GreenLeaders, an umbrella group for more than a dozen student sustainability organizations.

The initiative worked: One-third more students began recycling, and nearly two-thirds fewer recyclables landed mistakenly in trash bins. Single-stream recycling now is being rolled out

in the residential colleges and ultimately will be used across campus.

The Association for the Advancement of Sustainability in Higher Education, a nonprofit research group that evaluates 309 institutions through its Sustainability Tracking, Assessment, and Rating System (STARS), gave Princeton its second-highest rating, silver. Among Princeton's peers, Cornell, Columbia, and Stanford received gold ratings and Yale a silver.

Shana Weber, director of Princeton's Office of Sustainability, said that the STARS assessment did not fully reflect the University's progress, but it shows "there is a great deal more to do." Ultimately, Weber envisions sustainability not as a distinct initiative but as "second nature." Drawing on studies of human decision-making, she hopes that Princeton will weave behavioral science into new reforms. The single-stream recycling pilot "worked to change behavior," she said, for instance, "but we don't know precisely why."

For his senior thesis, Theodore Eyster '13 assessed the impact of the project to restore the stream between the Frick chemistry building and Washington Road. Now an associate at an environmental-consulting firm, Eyster draws on his thesis work as he tests water quality and writes technical reports.

Said Weber: "The biggest impact on sustainability is through research and students going out into the world." ♦

*By Dorian Rolston '10*

**MENINGITIS IMPACT**

**Admits' Visits Cut to One Day**

In response to the meningitis outbreak on campus, the University has canceled the overnight stays that are part of Princeton Preview, when newly admitted students visit campus. The program was scheduled for April 10 and 28 as one-day events. Though the Centers for Disease Control and Prevention (CDC) has not recommended canceling any events or activities on campus, Princeton cut the overnight stays "out of an abundance of caution," a University statement said.

In March, a student at Drexel University in Philadelphia died from the same strain of meningitis that sickened eight people on Princeton's campus last year. The Drexel student had been in close contact with students from Princeton about a week before becoming ill, according to the CDC.

The two recommended doses of the vaccine Bexsero — which was made available at the recommendation of the federal government to stop the spread of the disease — have been administered to 89 percent of those eligible at Princeton, and 91 percent of all undergraduates. Bexsero, used in Europe and Australia, is not licensed in the United States.

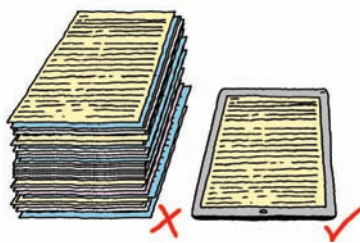
Incoming freshmen will be eligible to receive the vaccine when they arrive on campus for the upcoming school year.

A University spokesman said no changes were anticipated for Reunions, to be held May 29–June 1. About 20,000 visitors attend the event each year.

♦ *By J.A.*



**43%**  
of "household" materials (paper, plastic, metal, etc.) were recycled in 2013, up from 38% in 2006  
GOAL: 50% in 2014



**35%**  
less paper purchased in 2013, compared to 2008



**60**  
sustainability-related academic-program certificates awarded in 2013, up from 22 in 2008

Source: Office of Sustainability



STUDENT DISPATCH

## A Group's Drinking Event Puts Spotlight on Alcohol Use

*Louise Connelly '15*



After years of keeping a low profile, Princeton's enduring 21 Club drew attention when students drinking at a club function in March damaged Tiger Inn property, leading to the resignation of four Tiger Inn officers.

"Our officers neither planned, hosted, nor participated in the function, but they allowed it to take place, putting the community at risk," said Robert "Hap" Cooper '82, Tiger Inn board president and a 21 Club alumnus.

Reported to have originated in 1881, the 21 Club has been described as one of the nation's longest-running college drinking fraternities. Its all-male membership comprises 21 juniors and 21 seniors. Alumni include such high-profile names as former secretaries of state James Baker '52 and George Shultz '42.

Cooper remembers that his own sign-in ceremony "started out as a lot of fun, but quickly turned unpleasant and ended badly," with members consuming 35 beers in short order. After his body temperature "plummeted," he said, friends held him up in a hot shower, then sat with him through the night. "The physical effects of the alcohol poisoning lasted days," he said. "The whole episode scared me straight."

Perhaps because of an increasingly watchful administration and a diversification of student interests, the

21 Club recently has operated under the campus radar. Members are reluctant to comment about club activities to the press. Though the club today seems like a relic of Princeton's old-boys-club era, heavy drinking on campus is no antiquated custom.

"High-risk drinking continues to be a significant public-health problem on college campuses, and Princeton is no exception," said Dr. John Kolligian, executive director of University Health Services (UHS). "We acknowledge that there is no single solution." UHS works to prevent dangerous drinking through initiatives such as a pre-matriculation online course on alcohol education and bystander-intervention programs.

"One of the most important things we can do is change students' perceptions about the prevalence of drinking on campus," said John McNamara '14, a member of the Alcohol Initiative committee, which allocates University funds in support of social alternatives that are not alcohol-centered. "Many students are uncomfortable with high-risk drinking, but they are afraid to express this sentiment."

Others saw the recent 21 Club news in a different light. "In some ways, the 21 Club romanticizes drinking, and the fact that it's a big deal shows that people aren't drinking that way normally," said Gabriel Fisher '17. ♦

IN SHORT

**MORE THAN 200 FACULTY MEMBERS** signed a letter in *The Daily Princetonian*, responding to comments about sexual assault made by Susan Patton '77, author of *Marry Smart*. In her book, Patton wrote that a provocatively dressed, drunken woman "must bear accountability for what may happen." The faculty letter stated that signers "do not believe that [students'] manner of dress or drinking behavior makes them responsible for unwanted sexual assault."

In a *Prince* interview, Patton said women must take responsibility for themselves and their own safety, since they are most likely to be harmed. In their letter, faculty members said they "stand behind victims of sexual assault and want them to know that our campus is a place where they have a voice, where they will not be made to feel responsible, and where they can find support and justice."



**SIMON LEVIN, the George M. Moffett Professor of Biology, will receive**

**the \$200,000 Tyler Prize for Environmental Achievement April 25 in Los Angeles for research that has shaped environmental policy and advanced the study of complex ecosystems. Levin's work "has bridged the theoretical with the work of ecologists in the field, and connected complex ecological systems to social science and environmental and public policy," said the head of the prize committee.**

Illustration: Tomasz Walenta; Photos: courtesy Louise Connelly '15; Denise Applewhite/Office of Communications (Levin)



Midfielder Tom Schreiber '14 leads the No. 19-ranked men's lacrosse team in goals and assists.

## MEN'S LACROSSE

# The Top Pick

## High-scoring midfielder Schreiber '14 drafted first by Major League Lacrosse

**H**e was the first overall pick in the Major League Lacrosse draft in January, but Tom Schreiber '14 doesn't like talking about himself. "It was cool — it was an honor," he said. "There have been a lot of great players who have had that title."

The midfielder leads the men's lacrosse team, ranked No. 19, in goals and assists and is described by head coach Chris Bates as a "dynamic, multi-dimensional, competitive" player who can create a shot whenever he wants. Perhaps as importantly, Schreiber knows when another play could create a better shot and is quick to spread the wealth.

"For the position he plays, he's unique in terms of how well he distributes the ball," Bates said. "To have a quarterback from the midfield is pretty rare."

Schreiber wasted no time in becoming a major part of Princeton's offense, earning Ivy League Rookie of

the Year and All-Ivy honors in 2011. He has led the Tigers in points for the last three seasons, racking up enough assists in 2013 to have the most overall points despite scoring 15 fewer goals than Mike MacDonald '15. Always a leader on the field, he said he has matured as an upperclassman on a relatively young team.

"It's very easy to just lead by example or just yell at a guy if he's not working hard, but something Coach has taught all the leaders on the team is to circle back with a lot of guys after practice in the locker room," Schreiber said.

"People follow him just by the very nature of who he is," Bates said. "We're trying to help him see how he can demand more of others — he demands so much of himself. Sometimes that's hard when you're the very best player out there, to feel like you can demand [excellence] of others."

Schreiber is not allowed to have contact with the MLL team that drafted him, the Ohio Machine, until after the season. For now, he is concerned with winning the Ivy League Tournament in May, in which the top four teams in the league compete. Narrow losses to No. 14 Yale March 22 and Brown March 29 left the Tigers tied for fourth place in the league. They likely would need to beat Dartmouth and either No. 2 Cornell or Harvard to secure a place in the tournament.

Princeton, which has notched quality wins over Villanova and No. 13 Penn, ranks second in the Ivy League in scoring, averaging just under 13 points per game. Attackers MacDonald and Ryan Ambler '16 are among the top 10 in the league in assists, and midfielder Jake Froccaro '16 tied a 63-year-old school record by scoring 10 goals against Yale.

Still, the Tigers know they can't afford to make mistakes. "Offensively, I think we just have to be a little smarter with the ball," Schreiber said. "Defensively, we're young, so I think those guys' getting a little more experience will help us."

"I know we're hungry," Bates said. "If we prepare like an underdog, that's going to serve us well." ♦ *By Stephen Wood '15*



From left, Ted Moskovitz '17, Greg Hughes '96, and Keanan Clark '13 cheer on Special Olympics rower Antony Pontoriero at the Crash P.

EXTRA POINT

## Sharing Skills, Rowers Add New Athletes to the Boathouse Community

*Brett Tomlinson*



There are no boats and no water at the Crash P, the rowing program's annual ergometer regatta. Inside Shea Rowing Center, scores of athletes test themselves against the clock on a long line of rowing machines. But with more than 200 cheering fans and team members perched just behind the action, the event provides an intense, race-like atmosphere.

This March, the field included a fresh group of rowers: 20 children and young adults with intellectual disabilities who participated in a series of Special Olympics clinics led by Princeton coaches and students. Coach Greg Hughes '96 had a hint of hesitation when he introduced his new crew, wondering if the crowd might be intimidating, but he soon saw there was no reason to worry: "They totally ate it up. There was no fear or anxiety in any of those kids — they're real competitors. It was awesome to see."

Since November, the Special Olympics athletes had been training each Sunday, a rest day for the Tiger crews. David Mackasey '14, whose mother is a special-education teacher in his native Montreal, was among the regular volunteers. A member of the varsity

heavyweight crew, he said he enjoyed the chance to switch roles and be a coach for an hour or two each week. Teaching technique required time and patience, but before long, the newcomers picked up the basics and began measuring their progress, shaving seconds from their erg times.

"When you're a coach and you're working with someone and you see that flash go off, it's a really rewarding experience," Hughes said. "I think for our athletes, that's what they saw — they saw these kids get the bug."

The Crash P ushered in the spring season and marked the end of the Special Olympics rowing program, for now. But Princeton will play a prominent role in the Special Olympics National Games, coming to New Jersey in June, as host of the swimming and track and field events. (Rowing is not part of the National Games.)

Mackasey hopes to see his teammates continue the rowing clinics next fall. With a state-of-the-art training facility, its own body of water, and a tight-knit community of 170 student-athletes and 12 coaches, the Princeton rowing program has much to offer.

"We're definitely lucky as a team," Mackasey said. "It's nice when we have an opportunity to share that with people." ♦

## SPORTS SHORTS

Defending champion **FENCING** finished second to Penn State in the NCAA Championships March 20–23 in Columbus, Ohio. Three Tigers shared third place in their respective events: Jack Hudson '16 in men's epee, Gracie Stone '16 in women's saber, and Susannah Scanlan '14 in women's epee.

In the season-opener for **ROWING** on Lake Carnegie, the men's heavyweight team beat Syracuse and Georgetown, and the third-ranked men's lightweight squad took first ahead of the Hoyas. The women's open team took second, three seconds behind Brown.

Both **TRACK & FIELD** teams won their outdoor-season debuts at the Walt Disney World Track & Field Open March 21–22, the women claiming 13 events and the men claiming nine. Julia Ratcliffe '16 won the hammer with a throw of 66.31 meters at the Monmouth Invitational the next weekend, placing her at the top of the NCAA standings.

Erin McMunn '15 scored four goals as **WOMEN'S LACROSSE** (6–3, 2–1 in Ivy play) topped Cornell 10–7 in overtime en route to the program's 400th victory at Class of 1952 Stadium

March 29. ♦  
By Dorian Rolston '10



Erin McMunn '15

Photos: Aleka Gürel '15 (Special Olympics); Frank Wojciechowski (Tomlinson); Beverly Schaefer (McMunn)



# Life of the Mind

## MUSICAL THEATER

### Danger As Well As Joy

**Musical theater expresses our struggles for community, says Tamsen Wolff**

**T**he halls are alive with the sound of music — the halls of McCosh, that is. That’s where Professor Tamsen Wolff teaches a course on the history of American musical theater. Unsurprisingly, her students tend to be avid fans of the form, and thus prone to breaking into song.

“When I go around the room and ask people to just sing a snatch of anything they love, almost everybody will — and they’re not singers!” says Wolff, whose affection for musical theater bloomed from backyard performances of *My Fair Lady* at age 9. Wolff has directed several plays at McCarter Theatre and worked as a dramaturge, analyzing a play’s dramatic composition.

She enjoys examining musical theater as an academic, though to some it may not seem worthy of serious study. For Wolff, a professor of English, musical theater is “our most American art form” and a means of exploring the history of the United States — specifically, how communities come together and at what cost. Most people go to the theater because it makes them happy, but musicals, she says, are as much about danger as they are about joy.

On the stage, singers unite to form the chorus, and dancers perform in sync. The performance itself is an example of those on stage joining with audience members in a shared experience, Wolff says. But many musicals convey the dark side of community. In *Oklahoma!*, when the romance between the two central characters is threatened by a farmhand, he is killed and his death is “swept under the rug,” Wolff points out. The musical

moves on to a happy song-and-dance number, and the couple ride away. The story line endorses the sacrifice of an individual for the benefit of the community, Wolff says.

*West Side Story*, produced in 1957, was the first musical focused on “society’s outsiders who want in, as opposed to social insiders solidifying their base,” says Wolff. Notably, the lovers from warring gangs fail to remain together and the gangs form only a tenuous truce, challenging the musical convention that groups find unity onstage through singing and dancing.

By the time Stephen Sondheim’s *Assassins* had come to the stage in 1990, violence had moved to the forefront of musicals. Various real-life figures, such as Lee Harvey Oswald, arrive at a murderous carnival, and are invited to step up and solve all their problems by shooting a president. The assassins are social misfits who see fame and celebrity as the route to social inclusion, even if it’s achieved through an act of profound violence.

Wolff says the evolution of violence in musicals — from peripheral events that are overshadowed by singing and dancing to the central driver of the action — encapsulates the story of America, a nation that has struggled profoundly with questions of division and unity. “Watching and participating in musicals is often as much or more about thrill or danger,” Wolff says, “as it is an opportunity for uplift or cheer.” ♦  
By Eveline Chao ’02



**Most people go to the theater because it makes them happy, but musicals, Tamsen Wolff says, are as much about danger as they are about joy.**

For most of human history, the question of responsibility to a stranger halfway around the world was largely hypothetical, but no longer, professor of religion Eric Gregory says.



RELIGION

# The Good Samaritan

## How do we think about our obligations to strangers in a global community?

Log on to Facebook and you may see requests to support a friend's local breast-cancer walk and to donate to earthquake-relief efforts halfway around the globe. How do you decide which worthy causes to support? Professor of religion Eric Gregory has gone back to the biblical parable of the Good Samaritan for guidance about how to weigh our moral obligations in our rapidly shrinking global community.

In the Good Samaritan story, a traveler is beaten and robbed by bandits along the road from Jerusalem to Jericho. Two religious men pass by without offering assistance. Then a Samaritan arrives on the scene and binds the stranger's injuries, carries him to an inn, and pays for his care. The Good Samaritan's actions have been invoked by many over the years, for many purposes.

Henry Luce, the founder of *Time*

and *Life* magazines, said that America should be "the Good Samaritan of the entire world" by bringing its way of life to other countries, Gregory notes. This line of thinking became a "pretense for paternalist and imperialist ambitions," Gregory says. In 1967, Martin Luther King Jr. broadened the parable's lesson from short-term charity to long-term institutional change. Proclaiming that "true compassion is more than flinging a coin to a beggar," King used the Good Samaritan story to argue that one had an obligation to make the Jericho road safer. Gregory analyzes various applications of the parable in an upcoming book, *What Do We Owe Strangers? Globalization and the Good Samaritan*.

Princeton professor of bioethics Peter Singer argues that aiding needy global neighbors is such a moral imperative that people have a duty to forgo life's

extravagances and use the money to save lives in far-off countries. Singer's philosophy "is very hard to live up to," Gregory says.

But the Internet and the global economy have connected us to distant "neighbors" and increased the urgency of the discussion, Gregory points out. For most of human history, the question of responsibility to a stranger halfway around the world was largely hypothetical. Now we wear clothes made in sweatshops in Cambodia and read tweets about bombings in Syria.

Our consumption of international products and access to information about other countries has created new relationships that may make us complicit in injustice, Gregory says, and therefore we have a duty to educate ourselves about these issues and take action.

"The [Good Samaritan] parable reverses the question, 'Who is my neighbor?' which can be detached and speculative, to the more direct: 'To whom am I being a neighbor?'" Gregory says. He hopes that people will ask themselves how often they are "crossing the road in the face of desperate need." ♦ By Jessica Lander '10

GEOSCIENCES

## Visualizing the Earth's Interior

**Waves to images** Jeroen Tromp is creating a map of the Earth's interior, which is composed of layers of iron and nickel, flowing liquids, and tectonic plates that combined are nearly 4,000 miles thick. Scientists study the Earth's interior by measuring ground motions on the planet's surface, explains Tromp, a professor of geology and applied and computational mathematics.



Tromp

Images of the Earth's layers are created using a technique called seismic tomography. Different types of seismic waves pass through the Earth, traveling at different speeds and resulting in different wave patterns. These seismic waves are generated by earthquakes or induced with explosives, and are measured with seismometers, stethoscope-like devices that are placed on the Earth in different locations. Using this data, the structure of the planet's interior is inferred in the same way that X-rays, passing through the body in different patterns, create a map of its interior.

**Super boost** In the last 10 years, the methods used to create these 3-D maps of the Earth have become more

sophisticated, incorporating fine-tuned data and more precise numerical models. Tromp, a key developer of the new methods, received a grant this year from the U.S. Department of Energy (DOE) that provides access to supercomputers that run his complicated models and simulations. The DOE project makes data freely available to scientists and the public. "This is an amazing resource for our lab. It changes everything," says Tromp.

**Deep Earth exploration** Tromp recently completed a detailed map of Europe, which confirmed that the African tectonic plate is submerging underneath the European plate. For his map of the Earth's entire interior, he is compiling data from 250 earthquakes that occurred in the last 20 years. These maps are used to identify oil and gas reservoirs prior to drilling and to simulate ground motions during earthquakes. Such simulations help civil engineers design and situate buildings to better withstand earthquakes. But for Tromp, it's all about his curiosity about how the Earth works: "It's just as exciting as questions about the cosmos and planetary systems. I continue to be fascinated and astonished by the activities that happen in the Earth's deep interior." ♦ *By Anna Azvolinsky '09*

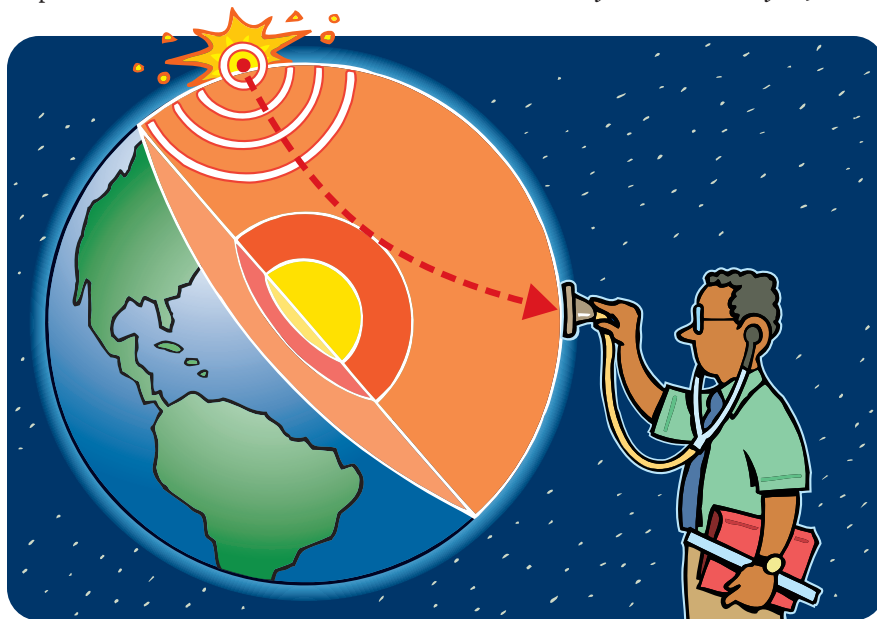


Illustration: Phil Scheuer; photo: courtesy Jeroen Tromp

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PROFESSOR  
MICHAEL  
GRAZIANO '89 \*96  
DEVELOPS A  
NEW THEORY  
OF WHAT IT  
MEANS TO  
BE CONSCIOUS

# In Our Heads

BY MARK F. BERNSTEIN '83



MICHAEL GRAZIANO '89 \*96, an associate professor of psychology at Princeton, has proposed a new answer to an age-old question: What creates that sense of ourselves and the world around us that we call consciousness? His theory, which he lays out in a new book, *Consciousness and the Social Brain* (Oxford), surveys centuries of philosophy, psychology, and neuroscience. So it is disconcerting to hear him begin his explanation of consciousness by talking about a man with a squirrel in his head.

A psychologist friend, Graziano says, once had a patient who

was convinced he had a squirrel trapped inside his head. Not a mental image of a squirrel but a real one, buck-toothed and bushy-tailed, scrambling around his cranium. The man was certain the squirrel was there, even though that defied all logic.

Likewise, Graziano argues, most of us believe that an ineffable thing called consciousness resides within us. We are sure of it. Great philosophers and scientists have tried to explain consciousness but ultimately fallen back on the conclusion that at some level, consciousness simply “is.” René Descartes believed our minds consisted of an ethereal substance he called *res cogitans*. Immanuel Kant posited that humans were born with thoughts and ideas that exist independently of all reason or experience. Francis Crick, the co-discoverer of DNA, thought consciousness was something that emerged from the electrical impulses generated by our neurons.

But Graziano argues that we no more possess an inner essence or emanation than his friend’s patient possessed a squirrel. That “spirit” we are so sure resides within us — which many of us think of as consciousness — is nothing more than a crude story we invent to describe a physical process taking place inside the brain.

This is not to call Michael Graziano dull or unimaginative. He is, in fact, a polymath who wrote his first symphony — 12 seconds long — at the age of 8, and a second, somewhat longer one at 13. He has since published five works for string quartets and six full symphonies; the fourth symphony, called “A Child’s Symphony,” contains that 12-second composition he wrote as a young boy. (Some of Graziano’s work can be heard at [paw.princeton.edu](http://paw.princeton.edu).) Although one might guess that he most identifies with Mozart, perhaps the greatest prodigy of all time, Graziano says his musical idol is Beethoven, whose orchestrations he praises as “volcanically beyond common sense.”

He has written four novels under his own name on subjects ranging from science fiction to the last hours of a dying man, plus three novels for young readers under the pseudonym B.B. Wurge. His last children’s book, *The Last Notebook of Leonardo*, published in 2011, originated as a series of bedtime stories for Graziano’s now-7-year-old son, and tells of a mad-scientist father who turns himself into an orangutan and takes his son to the moon on a search for the last resting place of Leonardo da Vinci. Like all good children’s literature, there is a moral amid the fun:

“I hope you’re not going to turn me into anything,” the boy says when he first sees his orangutan-father.

“Don’t be silly,” the father replies. “I hope I’m turning you into a creative and imaginative person.”

Graziano himself grew into a creative and imaginative person in upstate New York, splitting his time between suburban Buffalo and a vacation home out in the country. His family did not have a TV, so he and his two sisters spent their time reading (Charles Dickens and James Joyce were favorite authors), writing, and making music. “We were very Robinson Crusoe,” he recalls.

He started studying piano at the age of 5 and became good enough that he considered playing professionally. As an undergraduate, he took all the courses required for a music major but majored in physics. Peter Westergaard, the William Shubael Conant Professor of Music emeritus, recalls Graziano as a student who understood tonal theory at an intellectual



**Professor Michael  
Graziano '89 \*96  
sometimes begins  
lectures by doing  
ventriloquism with  
his puppet, Kevin,  
which can lead  
listeners to think  
that Kevin  
has awareness.**

level and could apply it in his own compositions.

With many paths open to him, Graziano chose another passion — neuroscience — in part because it offered what seemed like an opportunity to achieve the career balance he wanted. “You could be a neuroscientist and still write symphonies in your spare time,” he explains. “You couldn’t be a composer and do neuroscience in your garage.” He also felt it was easier to do cutting-edge work in neuroscience than in physics, because less was known about it. “You can’t throw a stone without hitting a mystery,” he says.

Amid everything else he is doing (including serving on the PAW advisory board), Graziano has continued to dabble in physics as a hobby. His personal Web page contains two long, unpublished papers in which he imagines an alternate universe with special properties, and then spends a dozen or more pages exploring how physical laws such as quantum mechanics or special relativity would play out under those conditions. You know, for fun.

**F**or roughly the first 10 years of his career, Graziano — shy, ruffled, and rather impish in person — produced groundbreaking work on how the brain understands and reacts to the space surrounding the body. He then spent a decade or so studying the ways in which the brain controls movement, proving that the classic movement map of the body — the so-called *homunculus* — is much more complex than originally thought.

Although Graziano might have devoted his career to either of these fields, in 2008 he decided to undertake a new inquiry, the study of consciousness. “The purpose of science isn’t to be an expert,” he says. “The purpose of science is to gain new insight.” When he begins to feel that his creativity in any area is waning and he is “not making contributions that are really insightful anymore ... that’s the point where I’ve got to get out.”

The question of consciousness and how it arises long had interested him, but as Graziano began scouring the voluminous academic and philosophical literature on the subject, he found himself dissatisfied. Over the past 20 or so years, two theories of consciousness have dominated. One, developed by Bernard Baars at the Neurosciences Institute in California, suggests that bits of pre-conscious information compete for access to a “global workspace” in the brain, which acts like a stage in a theater where conscious perceptions play out. The other, championed by Giulio Tononi of the University of Wisconsin and Nobel Prize winner Gerald Edelman, sees consciousness as a highly complex neural process that cannot be explained by referring to particular areas of the brain. Graziano felt that these and other theories got stuck at a certain point before declaring that consciousness just “happened,” that it was ultimately some sort of philosophical or physiological magic trick. His new theory “pulls the rug out” from under existing beliefs, says Aaron Schurger ‘09, a senior researcher at the Brain Mind Institute of the École Polytechnique Fédérale de Lausanne in Switzerland.

Graziano’s first attempt to articulate a new theory, a book published in 2010 called *God, Soul, Mind, Brain: A Neuroscientist’s Reflections on the Spirit World*, was aimed at the general public. When fellow neuroscientists pressed him to develop his ideas in a peer-reviewed journal, he obliged

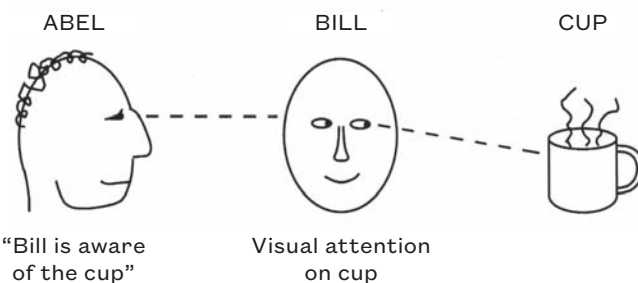
them, collaborating with his wife, Princeton psychology professor Sabine Kastner, on an article published in *Cognitive Neuroscience* in 2011. The new book, *Consciousness and the Social Brain*, followed in 2013; aimed at a lay and academic audience, it expands the theory and its underpinnings further.

Graziano calls his idea the “attention schema theory,” and it goes like this: Every living thing is constantly bombarded with stimuli — sights, sounds, and smells — and also, in humans at least, thoughts, memories, and ideas. The brain cannot process all of these stimuli at the same time, so it focuses its limited resources on some signals to the exclusion of others. This process is called attention: a method used by neurons in the brain to handle data.

Just as an architect uses models and blueprints to help understand the house she is building, the brain creates a model to help understand its own attention. Your brain not only creates models of the things you are attending to, it also creates a model of what it means to pay attention to them. This model, Graziano says, is awareness. To many neuroscientists, including Graziano, explaining awareness is tantamount to explaining consciousness, the total of the sensory information, ideas, memories, and sense of self you have in your mind. Once we understand how the brain can be aware of anything at all, we can begin to understand the full range of consciousness, he says.

Graziano’s attention schema theory breaks new ground by arguing that your awareness or consciousness of a thing — for example, a blue sky — is not some ethereal essence, but simply information encoded in the brain. As he explained last August in an article published in the online magazine *Aeon*, awareness “is not something magical that emerges from the functioning of the brain. When you look at the color blue, for example, your brain doesn’t generate a subjective experience of blue. Instead, it acts as a computational device. It computes a

## Human brains are adept at attributing awareness and consciousness to others — helpful for avoiding a predator or finding a mate (or, as Graziano shows, knowing that a friend might need caffeine).



description, then attributes an experience of blue to itself. The process is all descriptions and conclusions and computations. Subjective experience, in the theory, is something like a myth that the brain tells itself. The brain insists that it has subjective experience because, when it accesses its inner data, it finds that information.” Because the brain is a data-processing device, in other words, it can access only information that is encoded within it, just as a computer’s hard drive can access only data written on the drive.

Futhermore, he continues, as this internal model of attention collates data from different domains, it “unlocks enormous potential for integrating information, for seeing larger patterns, and even for understanding the relationship between oneself and the outside world.”

Human brains are also very adept at attributing awareness and consciousness to others. You see that a woman is paying attention to her watch, and construct a mental model of her state of mind that says that she is aware of the time. This awareness can be a good way to predict what she is likely to do next; Graziano suggests that the process might have evolved hundreds of millions of years ago to help animals predict the behavior of other animals — useful for avoiding a predator, for example, or finding a mate.

Human beings even impute awareness to things they know aren’t alive. To illustrate this, Graziano begins many of his lectures by talking to an orangutan hand puppet he calls Kevin. Just a few minutes of their Edgar Bergen/Charlie McCarthy shtick serve to make his point. Of course we know that Kevin is not conscious, but we can’t help thinking that something inside the puppet is aware of itself and the world around it. In much the same way, we attribute awareness to nature or to things we cannot see, which, Graziano suggests, explains the belief in ghosts and in a god.

Where in the brain does all this activity occur? That is the subject of ongoing research, some of it done by Graziano and his research team in the newly completed Peretsman-Scully Hall on the south edge of campus. Two parts of the brain, however, appear to be critical as a way to compute awareness. One is the *superior temporal sulcus*, a part of the temporal lobe that is believed to help the brain follow another animal’s gaze or movement. The other is the *temporoparietal junction*, which is understood to help the brain reconstruct the state of mind of others.

Damage to these areas of the brain can badly damage a person’s sense of awareness, causing a condition called hemispatial neglect. A person with hemispatial neglect might have damage to the right side of the brain and lose awareness of everything on the left side of space. Ask him to draw a clock, and he will crowd all the numbers onto the right side of it, without recognizing he has ignored the left side. His brain is still paying attention, however, and if you throw a ball at his left side, he will flinch without knowing why. His brain has lost the ability to model attention in that area into consciousness.

Graziano and his assistants are now conducting a range of neurological experiments to test his theory. In one of them, they put subjects in an MRI scanner and ask them to look at a cartoon face and impute awareness to it. What is the cartoon face looking at? What is its state of mind? When a subject tries to answer these questions, the temporoparietal junction of her brain lights up. Researchers then zap the

subject’s temporoparietal junction using trans-cranial magnetic stimulations, a procedure in which a very strong magnetic field disrupts the activity of neurons for a fraction of a second. Graziano’s team has found that doing this disrupts the subject’s own sense of awareness, suggesting that the same part of the brain that enables us to impute awareness to others also enables us to impute it to ourselves. Graziano often volunteers himself as a guinea pig in his experiments, insisting that they are not dangerous and their neurological effects only temporary. Besides, he says, “it is good to make sure the equipment, instructions, and everything else works right.”

Graziano acknowledges that his theory may make people uncomfortable in its contention that consciousness is nothing more than a model of attention. After all, people believe in souls and spirits. But he writes that many of our superstitions “emerge naturally from the simplifications and shortcuts the brain takes when representing itself and its world.” His article in *Aeon* drew about 400 comments on topics spanning from philosophy to God to zombie thought experiments. The theory has been discussed on psychology and philosophy blogs, with strong, though mixed, reactions.

If the brain is just a data-processing machine, then Graziano sees no reason we cannot create computers that are just as conscious as we are. It will require three things: First, the computer must be able to sort information and control its actions the way the brain processes attention. Second, it must be able to create models that track, simulate, and predict patterns of attention in itself and in other things. Finally, it must be able to link its attention schema to information about itself and those other things. Graziano believes that a team of talented programmers with enough funding could do this in about a decade.

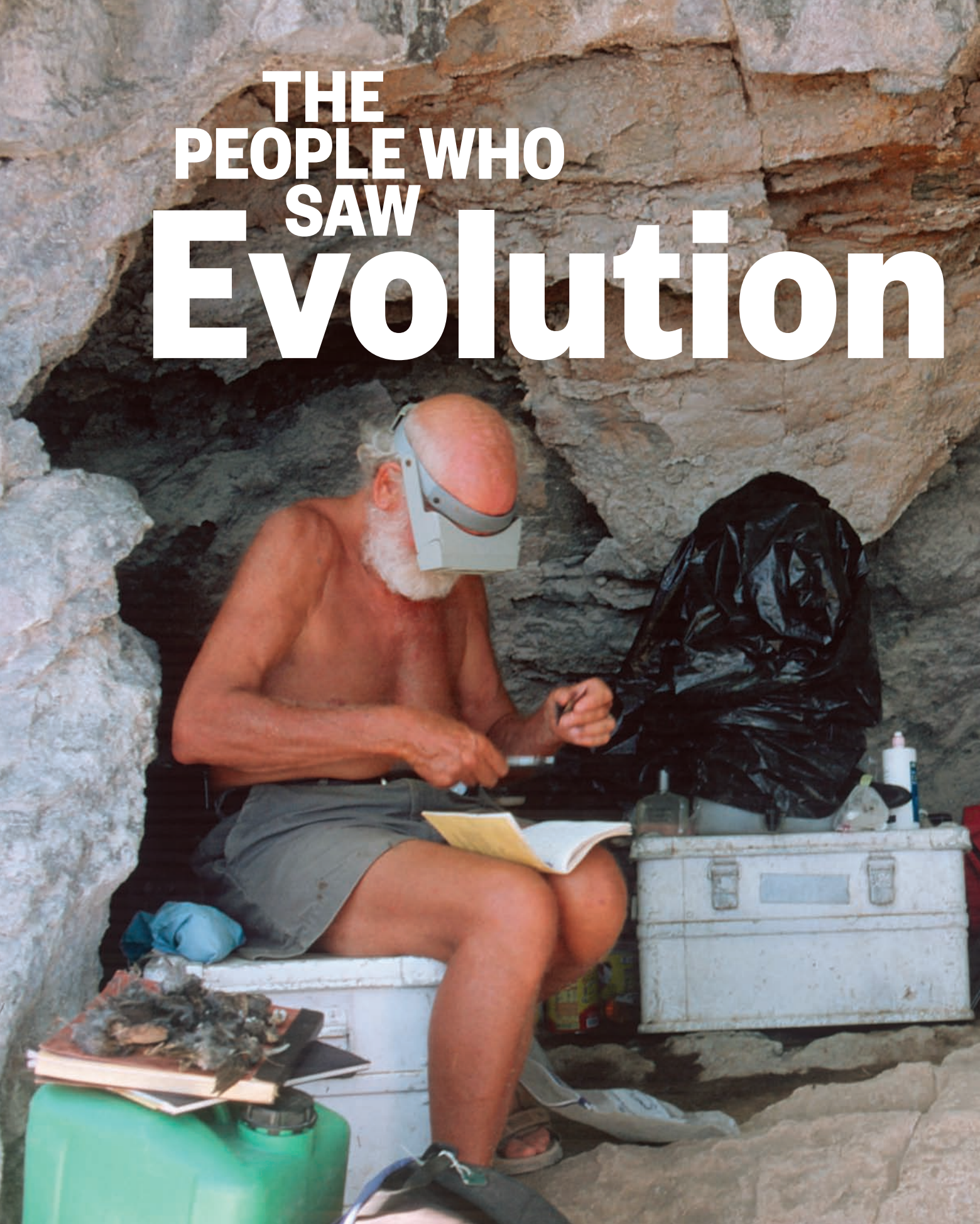
Although he is an atheist, Graziano accepts that a sort of afterlife does exist in the imperfect models of our personalities that live on in the minds of those who knew us. But he considers it a “technological inevitability” that a computer-generated afterlife someday will be possible as well, as technology enables us to copy the information in our conscious minds and store it after we are gone. “Don’t want to die?” he asks. “Download your consciousness onto a central server and live in a simulated world with all the other downloaded souls. When your body dies, a copy of your mind will persist.”

Such a future may sound bleak, but take comfort. A neuroscientist who writes children’s books and composes symphonies is enough of a humanist that he would not leave us completely bereft. Our ability to impute awareness to ourselves, he believes, is the first step toward imputing it to others, and that is what has enabled us to become successful social beings. Intuiting what takes place in other people’s minds, he writes, “allows us to work together: It gives us our culture and meaning, and makes us successful as a species. We are not, despite certain appearances, trapped alone inside our own heads.” ♦

Mark F. Bernstein ’83 is PAW’s senior writer.

 **WATCH:** Video of Graziano demonstrating the illusion of consciousness through ventriloquism and listen to two of his symphonic compositions at [paw.princeton.edu](http://paw.princeton.edu)

# THE PEOPLE WHO SAW Evolution





# After 40 years of research on Darwin's finches, Peter and Rosemary Grant have written their valediction

BY JOEL ACHENBACH '82



Peter and Rosemary Grant sit in a cave on Daphne Major Island in 2004. The cave generally was used for cooking; here, Peter is shown measuring the beak of a finch.

Lukas Keller/University of Zurich

P

eter and Rosemary Grant are members of a very small scientific tribe: people who have seen evolution happen right before their eyes.

For the Grants, evolution isn't a theoretical abstraction. It's gritty and real and immediate and stunningly fast. To witness evolution, they needed cameras, measuring instruments,

computer databases, and advanced laboratory techniques for genetic analysis. Most of all, they needed to be there in person — in the field, on the ground, enduring baking days and sweltering nights, cooking in a cave, sleeping in tents, and somehow sustaining themselves on a tiny island in the Galápagos that any reasonable person would declare to be uninhabitable.

The island is a steep-sided volcanic extrusion named Daphne Major. It is so inaccessible that it has no beach, no landing area, just wave-chewed vertical edges plunging into water so deep it might as well be bottomless. Visitors don't land on the island so much as they leap to it, jumping from a small boat onto a tiny ledge.

In the Galápagos, the Grants studied Charles Darwin's finches for 40 years. That was not the original plan when they first visited in 1973: They thought they'd be at it for two. Now the research is done — a monumental achievement, and the subject of a valedictory book, *40 Years of Evolution*, published this month by Princeton University Press.

The story of Peter and Rosemary Grant is an unusually satisfying tale. Obviously there's the scientific success: They're legendary in their field. In their office in Eno Hall they have a blown-up photograph of the two of them receiving the Kyoto Prize — often regarded as the Japanese equivalent of the Nobel — for their lifetime achievements in basic science. They also have achieved renown among the general public, thanks to the Pulitzer Prize-winning 1994 book *The Beak of the Finch* by Jonathan Weiner.

The Grants have now been married 52 years. They're both 77 years old. In a practical sense, their work is done. "We feel with the book we've written, we're closing a chapter on our field research," Peter Grant says. "If we go back at all, it'll be for short periods, doing interesting things."

And yet they can't truly be finished with their research, because evolution never screeches to a halt, or reaches a final, optimizing moment. Evolution isn't progressive, linear, deterministic, and destination-driven. Evolution never retires.

"We never reached an identifiable point of diminishing returns, or experienced a sense of completion," the Grants write near the end of their book. "[O]ne conclusion we draw after 40 years is the same as the conclusion we drew after 20 years: Long-term studies in ecology and evolution should be pursued in an open-ended way because for many of them there is no logical end point. Darwin's finches have much more to teach us."

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**T**he Grants are almost comically warm and fuzzy, and still in great running condition, save a couple of dents in their fenders. They've been at Princeton since 1985 and live a couple of miles from campus, not far from Lake Carnegie.

Their relationship reflects the biological principle of fusion: They have not merely adapted to one another, but have merged to a point in which there is little sense in writing about one without immediately discussing the other. They are deferential to one another, never interrupting, and often looking at one another to see if the other wants to go first.

When I ask what Darwin didn't know when he visited the Galápagos in 1835, they answer in unison: "Genetics."

Once, when Peter was out of town giving a talk and Rosemary was in Princeton, they independently had the idea of writing a paper discussing the effects of natural selection on a certain plant on the Galápagos island of Española. When Peter returned, he said, "Here's my paper." She said: "Well, here's mine." They decided to give both papers to their graduate students. One student said, "Both papers are rubbish." The Grants put their heads together and came up with one paper that was vastly better than the two originals.

She's from the Lake District in England and attended the University of Edinburgh; he's from London and attended Cambridge. They met at the University of British Columbia in Vancouver in 1960, where Rosemary was lecturing in embryology, cytology, and genetics, and Peter — still a graduate student in zoology — was her teaching assistant. They married in early 1962. After stints at McGill University and the University of Michigan, the Grants arrived at Princeton in 1985. Among other things, both taught upper-level undergraduate courses in ecology and evolutionary biology, along with a course for first-year graduate students on new developments in ecology, evolution, genetics, and conservation.

"I don't think we've ever competed with each other," Rosemary says. "We come at things very differently. But it's always had a synergistic effect."

It helps to have a sense of humor, she adds.

Rosemary: "We're not *polite* to each other."

Peter: "I'm polite to you!"

**T**he island of Daphne Major is essentially pristine, unaffected by human influence, and largely free of the invasive species commonly found on settled islands. It is young: It rose from the sea only about 15,000 years ago. Daphne is, in effect, a field laboratory.

And Darwin's finches are ideal subjects for field research in evolutionary biology. They are tame, and thus easily captured for closer study and measurement ("Beak depth was measured with calipers in the plane of the anterior nares at right angles to the commissure, the line at which upper and lower mandibles meet," the Grants wrote). There are either 13 or 14 species of "Darwin's finches" — two populations of a warbler finch don't mix and have genetic differences but look very similar, hence the ambiguity. The finches of the Galápagos represent a relatively recent evolutionary event, descending from a common ancestor that came from the mainland two million to three million years ago.

The Grants did their fieldwork as a family; their daughters, Nicola and Thalia, grew up as part of the scientific team. The girls were 8 and 6 when they first went to the islands. They were homeschooled by their mother during the hottest part of the day, and in cooler hours would do their own research. Each could bring only a single small bag for the entire months-long camping trip. At night they'd listen to music on a Walkman cassette player. Nicola, the older daughter, remembers reading the *Lord of the Rings* trilogy and *War and Peace*. They had a violin, and serenaded the blue-footed boobies. They befriended the cub of a sea lion.

"Quite simply, it was magical," says Nicola. The Galápagos Islands "are like what the Celts call 'thin places' — places where the veil between heaven and earth is frayed. ... I don't remember ever being bored. We spent our days exploring whatever island we were on, swimming, inventing games, reading; and the older we got, the more we helped our parents with their research work."

Thalia: "There is always a moment in every child's life when they suddenly seem to wake up to the world, and for me it was in Galápagos at age 6. It feels like I was born there. For better and worse Galápagos has shaped my whole life, and every direction I have taken." She became a scientist, writer, and artist, the co-author of a book about Darwin and Galápagos.

Conditions were harsh. An early explorer, the bishop of Panama, wrote after a 1535 visit to the volcanic archipelago, "It looked as though God had caused it to rain stones." In his novel *Galápagos*, Kurt Vonnegut wrote of the Spanish explorers: "They did not claim the islands for Spain, any more than they would have claimed hell for Spain."

Charles Darwin visited in 1835 during the long voyage of the *Beagle*. He collected specimens of birds, to which he initially paid minimal attention. When he returned to London, zoologist John Gould informed Darwin that his bird collection included a host of new species of finches. Darwin wrote in his diary: "The most curious fact is the perfect gradation in the size of the beaks of the different species of *Geospiza* ... Seeing this gradation and diversity of structure in one small, intimately related group of birds, one might fancy that, from an original paucity of birds in this archipelago, one species has been taken and modified for different ends." In reading these lines, we see the theory of evolution in gestation.

In the middle part of the 20th century, the biologist David Lack visited the Galápagos and stuck around only for a matter of months. Evidently he did not care for the place, as he wrote in *Darwin's Finches* in 1947: "The biological peculiarities are offset by an enervating climate, monotonous scenery, dense

**I ASSUMED THE GRANTS HAD MADE ALLOWANCES FOR THE HARSHNESS OF THE ENVIRONMENT BY JUMPING INTO A BOAT NOW AND AGAIN FOR A QUICK TRIP TO CIVILIZATION ... BUT NO.**



The Grants in Princeton in March.

thorn scrub, cactus spines, loose sharp lava, food deficiencies, water shortages, black rats, fleas, jiggers, ants, mosquitoes, scorpions, Ecuadorean Indians of doubtful honesty, and dejected, disillusioned European settlers.”

Daphne Major is pretty much dead center in the archipelago, between the large islands of Santa Cruz and Santiago. Its total surface area is less than half a square kilometer.

I assumed the Grants had made allowances for the harshness of the environment by jumping into a boat now and again for a quick trip to civilization to take in a movie or enjoy a fine meal with a glass of wine poured from the napkined wrist of a sommelier. But no. There were no daily departures. There wasn't a boat at all. Without elaborate preparations, they could not leave. They had to bring all their supplies, including water, for months at a time. Still, the Grants loved what they were doing. Peter remembers that one time when he got off the island of Genovesa (another site for long-term fieldwork) he was asked, repeatedly, if he was grateful that he finally could take a hot shower. He said he'd prefer to finish his fieldwork. People persisted: Surely he was happy to be in civilized society! After protesting a few times, the scientist decided to play along. Sure, great to be back, he'd say — not meaning it at all.

The climate ranged from awful to brutal. There were prolonged droughts and prolonged, soaking, miserable rainy seasons. They would have to do much of their work early in the morning, before the heat became unbearable, the lava rock heating up under the equatorial sun. Weiner writes in *The Beak of the Finch*, “On many days the little island feels like the solar face of Mercury.”

The Galápagos Islands are in the line of fire when the Pacific surface warms up in an El Niño year and spawns daily, endless rainfall. During the wet years, the Grants struggled to dry out, even briefly.

This oscillation of misery would prove essential to the scientific

process, for the climatic extremes were, the Grants discovered, winnowers of the weak and major drivers of natural selection.

In what should have been the rainy season of early 1977, only 24 millimeters of rain fell. The Grants watched nature brutalize the two main finch species on Daphne, the cactus finch (*Geospiza scandens*) and the medium ground finch (*Geospiza fortis*). Most of the birds died.

The finches feed on different things — some feed on cacti, some will suck the blood of other animals — and their beaks have evolved to different sizes and shapes for this purpose. The Grants focused much of their research on the medium ground finches, which had short beaks adapted for eating small seeds. During the drought, the small seeds grew scarce, and the ground finches had to find alternative food sources. The only survivors were the medium ground finches with larger beaks capable of breaking larger seeds.

Beak size is heritable, and the ensuing *Geospiza fortis* generations had measurably larger beaks. This was natural selection (from the killer drought) and evolution (from the passing of the genes for larger beak size) in action, witnessed over just two years.

Then came the opposite extreme: Endless rains in 1982–83. The desiccated island suddenly was lush, and entangled by vines that grew several inches a day. The medium ground finches with smaller beaks proved more efficient at feeding on the superabundance of seeds and fruits. Now the average beak size for *fortis* nudged downward.

The drought of 1977 and the deluge of 1983 gave the Grants and their collaborators stunning insights into evolution in action and generated scientific papers that became iconic in the field of evolutionary biology. Hopi Hoekstra, an evolutionary biologist at Harvard and a huge fan of the Grants, says, “Anyone who has spent time ‘in the field’ knows that nothing goes as planned. Everything that can go wrong eventually will. But here is one of Peter and Rosemary’s greatest gifts: They can take an obstacle and make it into an opportunity. For example, the Grants can turn a major drought or an El Niño event into a beautiful experiment, and in turn gather some of the most celebrated data and results in evolutionary biology!”

**W**e all know how evolution works — or we think we know. Here's what I would have told you (before interviewing the Grants) about the origin of new species: It involves “natural selection.” There are ecological niches. There's competition. There's genetic mutation. Life is hard and nasty and at some point you have the “survival of the fittest.” Is that good enough? No? OK. Time is a key factor: Lots and lots of time will allow evolution to happen. It's like the secret ingredient, the sugar, in the recipe. With enough time your original species will turn into two species, including one that has horns or a tusk or dorsal spines or some kind of scary frill on the back of the head like a triceratops.

The truth is more complicated than that.

Evolution isn't linear. There are always many species in the mix, and they are co-evolving, competing, innovating, reproducing, dying, sometimes even going extinct. You have variations within species. There is simultaneous divergence and convergence. There are contrary winds. There are genetic



**In 1981, a new bird — the Big Bird — arrived on Daphne; one is shown at top. Though still immature, it had a beak that was larger and blunter than a typical medium ground finch, shown above. A prolonged drought opened room in the ecosystem for a new, hybrid Big Bird lineage, but the Grants still don't know whether it will survive or lose its distinctiveness.**

drifts and back-currents. There is hybridization. There are invasive species and a changing competitive landscape. Evolutionary change when viewed in the fossil record looks slow only because the oscillations — the herky-jerky improvisations — are hard to discern, and just the longer-term trends are readily preserved.

Over their seasons on Daphne, the Grants even witnessed the appearance of what some would call a new species. The Grants refer to it, more cautiously, as a “lineage.”

Here's what happened: In 1981, at a point in their research when they literally knew every finch on the island, a new bird arrived — a large one, 28 grams. The interloper, labeled 5110 (every bird gets a number), likely came from Santa Cruz, a large island visible from Daphne. It looked a lot like a *fortis*, but also like a *scandens*. Genetic analysis showed 5110 to be a cross between a *fortis* and a *fortis-scandens* hybrid. They called it “the Big Bird.”

The Big Bird had a unique song and, when mature, shiny black plumage that was different from the indigenous Daphne birds. It also was extremely “fit” in the Darwinian sense — and promiscuous, surviving another 13 years and mating with six females, producing 18 offspring. It mated with several *fortis-fortis-scandens* hybrids, then with *fortis* females, and began a new line of Big Birds that sang the song of the original immigrant.

The Grants noticed more changes during a prolonged

drought in 2003 and 2004, but these were different than the changes seen in the 1977 drought. This time, when seeds became rare, the larger members of the *fortis* species were outcompeted for the large seeds by another, bigger species, the large ground finch, *Geospiza magnirostris*. Meanwhile, the smaller *fortis* birds that fed on small seeds and needed less nourishment had a better chance of surviving. This was natural selection at work: The *fortis* population became smaller for generations to come.

The shrinking of *fortis* opened up room in the ecosystem for the new, hybrid, Big Bird lineage, which began thriving after the drought ended and the island greened up again. “An unresolved question is how long we should wait to see if the lineage will lose its distinctness by breeding with another species, or become extinct through fitness problems with inbreeding,” Peter Grant says. “We are reluctant to name the lineage as a new species when it has been in existence for only a few generations and may be short-lived.”

Scientists previously had reported seeing the processes of natural selection among bacteria, honeycreepers, cichlid fish, and fruit flies. As Peter Grant puts it, “Until we began, it was well understood that agricultural pests and bacteria could evolve rapidly, but I doubt that many people thought that about big, vertebrate animals.”

The Grants believe that hybridization is an important force in the rise of new species, and think this applies, too, to human evolution. For a long time, for example, paleontologists believed that Neanderthals and “modern *homo sapiens*” did not interbreed when they came into contact in prehistoric times, but recent research indicates that about 20 percent of Neanderthal genes have been preserved in our species. “It's almost been a hobbyhorse of ours,” Peter says. “We were saying, ‘I bet there has been gene exchange between the lineages of *homo sapiens* throughout their evolution.’”

**T**he Grants' new book is targeted at both lay readers and scientists familiar with their work, and broadly discusses their findings about natural selection, hybridization, population variation (why do some populations of birds vary more dramatically in beak size?), the potential vanishing of a species through interbreeding, and, of course, the potential origin of a new species — the Big Bird lineage. They also touch on global warming and its possible effect on Darwin's finches. Most of all, the book is an affirmation of the importance of long-term fieldwork as a way of capturing the true dynamism of evolution.

“Perhaps the biggest contribution of the Grants' work is simply the realization not only that evolution can be studied in real-time, but that evolution doesn't read the textbooks,” observes Jonathan Losos, a Harvard evolutionary biologist.

I ask the Grants what Darwin might say about their work. Rosemary: “I hope he would be very happy.”

Peter: “He'd say, ‘Just tell me about this inheritance business.’ Then we'd explain to him about genetics. And then he'd say, ‘Why stop at 40?’ And then I would say, ‘Do you realize we are four years older than you were when you died?’” ♦

Joel Achenbach '82 is a staff writer at The Washington Post.

# PRINCETONIANS

Michael Norton \*02 offers practical ways for people to improve their lives.



a doctorate in psychology at Princeton, recently has been exploring how people can derive more happiness from their money. How to find happiness is an engine motivating his work, which suggests practical ways for people to improve their daily lives.

**“It’s not that spending money on yourself is bad,” says Norton. “It just doesn’t do anything for you.”**

In the 2013 book *Happy Money: The Science of Smarter Spending*, Norton and his co-author, psychologist Elizabeth Dunn, laid out a set of financial-happiness principles, such as spending money on others. In studies conducted in colleges and offices, experimenters gave subjects money to spend within a fixed period of time. Some were told to spend it on themselves, and some to spend it on others. Surveying the subjects later, Norton and his colleagues found that the givers were happier. “It’s not that spending money on yourself is bad,” he says. “It just doesn’t do anything for you.”

At the business school, Norton applies these insights to companies, finding ways to design marketing programs so that customers will be happier with a company’s products and services. In an experiment with Crate & Barrel, some previous customers

*continues on page 28*

MICHAEL NORTON \*02

## WANT TO SMILE MORE?

*Give your money away, build your own table, and make chocolate a ritual*

Research has shown that more money leads to only slightly more satisfaction with life. “It doesn’t have as big an impact as we sometimes think,” says

Michael Norton \*02. “Is that because it can’t? Or is it because of the way we use it?” Norton, an associate professor at Harvard Business School who earned

### STARTING OUT

**RANA CAMPBELL '13**  
Program analyst at the Vera Institute of Justice in New York City, through a Pace Center Puttkammer '58 fellowship. Major: sociology.

**PROJECT:** Works on an initiative in three states that provides postsecondary education and re-entry services to inmates and newly released prisoners.

**DUTIES:** Campbell provides program support to state project leaders, including conducting prison visits and managing grant money.

**AFFECTING LIVES:**  
“It’s rewarding to know that we are giving these men and women an opportunity to change their lives.”



From top: photo illustration by Brian Smith, courtesy Rana Campbell '13

*continued from page 27*

were mailed coupons, and others got a gift card for a website collecting donations for classrooms in need — DonorsChoose.org. Norton found that the DonorsChoose.org group not only returned to Crate & Barrel’s website slightly sooner than the other group, but also that they gave the company much higher marks when surveyed on statements like “Crate & Barrel is a company that reflects my values.”

**Ritual, he discovered, also has its rewards.**

Norton dubbed another area of study the “Ikea effect.” He has found that people value the fruits of their own labor — even when that means merely putting together some-assembly-required furniture — more highly than things that come ready to use. “People have horrible artwork in their houses that they made themselves, and they thought it was amazing,” he says, “[but it’s] very, very meaningful to them.” Encouraging people to invest their own labor pays off in happiness.

Ritual, he discovered, also has its rewards. In one study, half the participants were given a chocolate bar to eat however they liked. The other half were told to unwrap the bar and break it in a ritualized way. The ritualists reported that the chocolate tasted better, and they savored it for a longer time. The effect persisted even when the chocolate was replaced with carrots.

Norton’s work over the years has been wide-ranging. While much of his recent work has centered on ways to improve daily life, he also investigates wealth and income inequality.

“Some people criticize social science and say that we observe what’s wrong and merely talk about it,” he says. But it doesn’t have to stop there. The work on daily-life interventions that he and his colleagues are doing is “interesting in its own right, but it has direct practical implications,” he says. “It’s also super-fun.” ♦ *By Graham Meyer ’01*

**WATCH:** A TED talk on money and happiness by Michael Norton \*02 at [paw.princeton.edu](http://paw.princeton.edu)



Shetal Shah '96 pushed for the passage of legislation that benefits some 240,000 babies born each year in New York State.

PROFILE: SHETAL SHAH '96

**PROTECTING BABIES BY VACCINATING PARENTS**

**Opportunity seized** During his neonatology fellowship, Shetal Shah '96 was called to the emergency room to treat a baby who had contracted influenza, which can be deadly in babies under 6 months of age. Shah recognized the infant as one who had been cared for previously in his neonatal intensive care unit (NICU). “We spend so much time, money, and human resources to get prematurely born babies well enough to leave the hospital, only to have them come back because of the flu,” he says.

**RÉSUMÉ**  
Neonatologist and researcher at the Maria Fareri Children’s Hospital of New York Medical College in Valhalla, N.Y. Majored in ecology and evolutionary biology.

**Immunizing the adults** That experience led Shah to take a leading role in boosting immunization of parents with babies in the NICU. Newborns are too young to be given the flu vaccine. But vaccinating those parents was no small feat. “Doing anything to parents is not considered to be within the scope of the neonatologist,” says Shah. Thanks to his perseverance and several research studies, the

American Academy of Pediatrics now encourages hospitals to give all parents the influenza and whooping cough vaccines. Shah advocated successfully for state laws that require New York hospitals to offer these vaccines to all parents (and other caregivers) with newborns in the NICU. While the laws are specific to NICU infants, Shah says most New York hospitals extend the vaccination programs to parents of all newborns.

**Beyond influenza** Shah is about to start a program at his hospital to screen new mothers of premature infants for postpartum depression. A pilot pneumococcal-vaccination program also is in the works for parents of NICU babies. Today, he says, “there is more understanding that we need to do whatever we can to promote the health of newborns.” ♦ *By Anna Azvolinsky \*09*

Michael Falco/Black Star

Q&amp;A: LT. GEN. MARK A. MILLEY '80

# WAR, INSURGENCY, AND A HIGH-STRESS COMMAND

After 13 years of war, the bulk of U.S. forces will leave Afghanistan this year. From May 2013 to last February, Lt. Gen. Mark A. Milley '80 was the second-highest general on the ground, overseeing daily operations for NATO. It was the third tour in Afghanistan for Milley, now commanding officer of the Army's III Corps and Fort Hood. PAW spoke with him about his job and where Afghanistan stands today. (This conversation took place before the April 2 shootings at Fort Hood.)

## Are the Afghans ready to go it alone?

The 2013 fighting season was the first where Afghan security forces were in the lead. In previous years, either [NATO forces] were doing it by ourselves, or the Afghans were working with us very closely. Last year their competence was very good, relative to their enemy's. They were doing very well tactically, and they still are. But the question is: Can they sustain that on their own? And the answer is: No, not yet. The advisory effort is still required in order to solidify things like intelligence, mission command, logistics, something as simple as pay [or organizing] spare parts for vehicles.

## What must the Afghans do?

To be successful, the Afghan security forces have to clearly demonstrate their ability to secure the people and to protect the regime from being overthrown. Can they do that? With a little bit of support and a little bit of help, absolutely, yes.

## What is the state of the insurgency?

In 2013, we did not see a single large attack. Did that happen because the insurgents were trying to husband their resources for the 2014 fighting season? Or because they didn't have the capability? I think it was the latter. A lot of their mid-level leaders and senior leaders have been killed over the years. Conducting operations involving 100–200 guys — that's pretty sophisticated to plan, coordinate, synchronize, and execute.

## What are they doing?

They employ terror. One bomb going off in Kabul that kills 10 or 15 people gets a lot of attention. Because of their lack of capability to take the Afghan security forces head on, they default to terrorist attacks. The Taliban are unpopular because they do some pretty vicious and violent things to innocent people. And if you're an insurgent, and you don't have political support among the people, then you are not going to achieve your strategic objective of seizing political power.

## How does the war come to an end?

At a certain point, the government of Afghanistan and the various enemy groups are going to have to come to terms over the political space. I don't know when that's going to happen. That is how most insurgencies come to pass.

## You only intended to serve four years in the Army, but you've been in for 33. Why did you stay?

I grew up in a house where my mother served in World War II with the Navy, and my father was in World War II with the Marines. So I wanted to serve my country, but I didn't think I'd make a career of it. But then I really liked it. I got this sense of commitment and of being involved in something that had a sense of purpose. Then 9/11 comes, and at that point, I've got 20–21 years in. When that happened, I said I can't retire: I had to stay until this thing is done.

## On your last deployment, you had about 100,000 U.S. and NATO troops under your command. How do you shoulder the demands of being responsible for so many lives?

It's incredibly high stress. You're looking at four hours of sleep, maybe five on a good night. Usually it's interrupted. I had 122 [U.S. and NATO soldiers] killed in action while I was over there, and several hundred more seriously wounded. That weighs on you heavily — every day, day in and day out — and it's never far from your mind. But through training, through experience, through a strong sense of purpose and a strong sense of the moral rightness of your cause, you learn to deal with the stress. ♦ *Interview conducted and condensed by E.B. Boyd '89*



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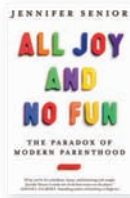
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PRINCETONIANS

READING ROOM: JENNIFER SENIOR '91

## THE HIGHS AND LOWS OF PARENTHOOD



Jennifer Senior '91 has been a politics reporter for more than two decades, covering presidents, senators, and Supreme Court judges. Yet her first book, *All Joy and No Fun: The Paradox of Modern Parenthood* (Ecco), tackles a subject arguably more provocative than politics: why modern parents find raising children so challenging.

Senior defines modern parenthood as starting after World War II, when children went from being “useful” to a family to being “protected” by the family. “The modern sheltered childhood is only 70 years old,” Senior says. “Kids have gone from being our help to being our bosses.”

The result? Parents are driving themselves crazy, Senior says, because their jobs have shifted from simply sheltering and feeding their children to making their children happy and preparing them for the future. “It used to be that your child inherited your farm,” Senior says. “Now we don’t even know what we are preparing them for, which is why we sign them up for everything.”



**What she is re-reading: Parts of *The Obamas* by Jodi Kantor. “It explains a lot about the present administration and is so good at showing what an introvert Obama is and the effects of that politically.”**

In *All Joy and No Fun*, Senior illuminates the lives of middle-class families and their struggles from the children’s infancy to adolescence, weaving the research of historians, economists, and psychologists through the families’ personal moments.

A contributing editor at *New York Magazine* and the mother of a 6-year-old and two grown stepchildren, she begins, for example, by investigating what happens to parents when they bring home an infant. She spends time with one Minnesota family with three children as they deal with sleep deprivation and the loss of autonomy. In past generations, new parents often have had families in close proximity or a bevy of older siblings to help; modern parents struggle with trying to do it on their own, she observes.

She also considers the effect children have on marriages and the division of household chores, how the frenzied cultivation of the “globalized, optimized” child leads parents on endless carpools to sports, scouting activities, and lessons, and how the modern battlefields of adolescence (which include “the inverted power structure created by ... children’s technological fluency”) affect family life.

Another theme of Senior’s book is that despite the stresses, children undeniably bring joy. Senior urges parents to seize and appreciate the “sweet little bursts of grace,” such as the smell of a baby’s head and impromptu dance parties in the kitchen.

*All Joy and No Fun* is not a book on *how* to parent. Rather, it is a book about how to make sense of the lows — and the highs. Parents are setting unreasonable expectations for their responsibility for a child’s happiness, Senior says. If our children aren’t happy, whether it’s because a mother doesn’t get down on the floor to play as soon as she walks in the door from work or because a father took away the iPhone, “we shouldn’t be so damn hard on ourselves,” she says. ♦ By Kathryn Beaumont '96



# CLASS NOTES

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Online Class Notes are password protected. To access, alumni must use their TigerNet ID and password. [Click here to log in: http://paw.princeton.edu/issues/2014/04/23/sections/class-notes/](http://paw.princeton.edu/issues/2014/04/23/sections/class-notes/)

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# MEMORIALS

**PAW posts a list of recent alumni deaths at [paw.princeton.edu](http://paw.princeton.edu). Go to "Web Exclusives" on PAW's home page and click on the link "Recent alumni deaths." The list is updated with each new issue.**

## THE CLASS OF 1937



### Penn Kimball '37

Penn Kimball died Nov. 8, 2013, in Chevy Chase, Md.

An Eagle Scout, Penn joined the class from the Lawrenceville School, where he was "head boy." He played football and was editor of *The Daily Princetonian*. A Rhodes scholar, he studied politics and economics at Oxford University.

During World War II, Penn joined the Marine Corps, separating as a captain. In the 1940s and '50s he worked as a journalist at *Time*, *The New York Times*, and CBS-TV, notably for its *Omnibus* series. In 1959 he became a professor at Columbia's Graduate School of Journalism.

In the 1980s, he learned through the Freedom of Information Act that he and his wife, Janet, had been declared national-security risks in government files peppered with misinformation and unnamed sources. He sued the government, and a Connecticut senator and federal judge reading the files cleared both his name and his wife's. Penn told the story in his 1983 book, *The File*.

Penn wrote other books on politics and urban planning. Janet died in 1982 after 35 years of marriage.

To Penn's second wife, Julie, and his two daughters, the class extends sympathy.

## THE CLASS OF 1938



### Howard P. Brokaw '38 \*39

Howard (or "Broke") died Dec. 20, 2013. He was 97.

He prepared for Princeton at Newark Academy and the Hotchkiss School. At Princeton he majored in chemical engineering and graduated with high honors. He was a member of Phi Beta Kappa and Tower Club. Freshman and sophomore years he roomed at 313 Henry; junior and senior years at Walker.

After graduate studies in chemical engineering at Princeton, Howard worked in the textile division of DuPont from 1939 to 1976. He retired at age 59 as director of marketing for the industrial-fibers division.

Howard did not serve in any wars. His position at DuPont was deemed too essential and his enlistment attempt was denied.

He had a passion for birding that led to his interest in conservation. In 2006 he was awarded the Marion Jenkinson Award for "lifetime service" by the American Ornithologists' Union. He was a founding patron and longtime trustee of the Delaware Museum of Natural History and served on the board of the Delaware Ornithological Society. As the grandson of American illustrator and artist Howard Pyle and a close friend of Andrew Wyeth, Howard was a great supporter of the arts.

He is survived by children Thomas C.T., Nicholas V.L. '70, Jeffrey, and Clotida; eight grandchildren; one great-grandchild; two nieces; and one nephew. His wife, Mary Ann, predeceased him by one year. Heartfelt sympathy goes out to his family.

## THE CLASS OF 1939

### Charles B. Swartwood Jr. '39

Charlie, our New York State Supreme Court justice, died Nov. 21, 2013, in Elmira, N.Y., his hometown. He was 98. His father, Charles Sr., had been a Chemung County Court judge.

Charlie left Princeton in the middle of his junior year to attend Cornell. At Princeton, he excelled in sports, playing on the freshmen football team and earning a letter in lacrosse. At Cornell, he stayed on to earn a law degree in 1942. During World War II, he served as a lieutenant on the destroyer USS *Dennis J. Buckley* in both the Atlantic and Pacific.

In 1948, he joined the Buck law firm and spent most of his time in litigation, which he found "fascinating." In 1972, he was elected to the New York State Supreme Court. He served until mandatory retirement at 76, then continued as a judicial-hearing officer and with the Civil Appeals Settlement Program of the appellate division in Albany, from which he retired on his 91st birthday. In 1992 he was honored when the Supreme Court named its law library after him.

To his wife, Nancy; children Caroline, Penny, Charles III (a retired U.S. chief

magistrate judge), Slater, and Mark, and the extended family, the class sends its sympathy.

## THE CLASS OF 1947



### Richard R. Decker '47

Richard Decker died Dec. 6, 2013, in Seattle.

He was born in Pittsburgh April 22, 1926, and entered Princeton in the summer of

1943. Returning after a short stint in the Army, Dick roomed with Phil Corsi '50, joined Court Club, and graduated in 1949. His business career was entirely with Alcoa, in sales and marketing. On his retirement in 1989, he was a senior marketing administrator.

Moving to Mercer Island, Wash., with his second wife, Ruth, Dick began another career as '47's most loquacious communicator. He regularly attended mini-reunions and kept up frequent phone conversations around the country with all whom he had met through the ensuing years. Dick also served the class in Annual Giving from 1997 until 2013.

Living in the Pacific Northwest, Dick maintained his outdoor pursuits of hiking and cross-country skiing, and made regular visits up and down the coast to participate in bridge tournaments. Through his church he mentored latchkey teens at an after-school malt shop. He also was a founder of Silver Lake Winery.

Outliving his wives, Sally and Ruth, and his son, Richard, Dick was joyful to be close to daughter Linda Barnes and granddaughters Elizabeth Johnson and Shannon Barnes. The class sends them fond remembrances of this exceptionally friendly man.

## Edward Ross Vogel '47

Edward Ross Vogel died Oct. 11, 2013, in Williamsburg, Va.

Born in New York City, Ross prepped at the Brooks School in Massachusetts and entered Princeton in June 1943, where he roomed with Phil Pope in Upper Pyne, over the Western Union office. After serving in the Air Force, he returned to Princeton, roomed with Branan ("Jake") Jacobs, joined Terrace Club, and graduated with an associate degree in 1947.

In 1951, Ross married Joyce ("Joy") Grosset, and they had daughters Katherine and Torrey. Joy's brother was Don Grosset '54. Torrey later married Branan Jacobs' son.

Ross' business career started at Allied Chemical. Following its merger with Mobil Oil, Ross, a marketing executive, stayed with ExxonMobil Corp. until his retirement in 1990. Most of his career was in international procurement, managing activities in Africa and Asia. His most interesting post was in New Zealand, where he and Joy were able to travel throughout the Far East.

Returning to Williamsburg after retirement, Ross could be found daily at the Kingsmill

Tennis Club, participating in his favorite sport. From that location the couple were able to attend our mini in Williamsburg.

Joy died in 2008, and Ross began a long period of poor health, with hospice care provided by Spring Arbor. The class sends sympathy to Katherine and Torrey and their children.

#### THE CLASS OF 1948

##### George R. Little '48

George was born July 19, 1926, in Colorado Springs, Colo., and died Dec. 9, 2013, in Brunswick, Maine. He was 87.

A history major at Princeton, George graduated in 1948 and then earned a master's degree in journalism at Columbia University. During his Army service at Fort Benning, Ga., he was a reporter-editor for several publications. After his service he joined his father, Franklin Little '22, as manager, then owner, of community newspapers in Potsdam, Ogdensburg, Massena, and Canton, N.Y.

He married Adele Dee Keatley in 1956, and they worked together as staffers, then editors-publishers-owners of the newspapers in upstate New York. In 1976, the Littles acquired and ran another group of local papers around Goffstown and Manchester, N.H.

In 1994 they retired, moved to Ogunquit, Maine, and wintered near Chapel Hill, N.C. They continued traveling frequently around the United States and in Europe and took classes at nearby UNC and Duke University. George also compiled and edited the Class of '48's elegant, informative 50-year book.

Dee survives him, as do two nieces and two nephews.

##### Clarence R. O'Crowley Jr. '48

Clarence died Christmas Day 2013 in Vernon, Conn., the family home for more than 50 years. He was 87.

Clarence was born in Newark, N.J., and graduated from Newark Academy. During World War II, he first volunteered for the Merchant Marine but then was commissioned in the Naval Reserve. In 1945, he was a medic during the American occupation of Berlin.

After graduating from Princeton and from the Wharton School at Penn, Clarence had careers in real estate, insurance, and banking. An American history buff, he was a longtime guide at the Nathan Hale Homestead in Coventry, Conn.

Catherine, his wife of 59 years, survives him, as do their daughters, Regina O'Crowley, Peggy Wholley, and Anne Gobar; son Michael; and grandsons James and Julian Wholley.

##### John H. Williams Jr. '48

Beau, a lifelong Baltimorean, died of heart disease there Sept. 27, 2013. He was 87.

Though he had entered Princeton in 1944,

Beau did not return for a degree after his Navy service. Instead he joined his family's prominent local construction company, and then, in 1951, upon his father's accidental death, became company president. (One of his business partners was our late classmate T. Courtenay Jenkins.) Over the next 45 years, the company was responsible for many construction, renovation, and management projects — including schools, shopping centers, office buildings, factories, and athletic clubs.

Beau's main hobby was raising racehorses on his 50-acre farm in the Maryland countryside. He was one of the founders of Shawan Downs, an equestrian and steeplechase center in Cockeysville. He also was active in land-preservation programs and served on the boards of an independent school and two medical organizations.

Beau's wife of 31 years, Nina (née Elder), died in 1989. His second wife, Maria (née Marshall), to whom he was married for 19 years, survives him, as do his daughters, Peggy Spears and Lela Williams; his sister, Elizabeth Harvey; and two grandchildren.

#### THE CLASS OF 1949

##### Albert A. Bailey Jr. '49

Albert Bailey died April 22, 2012. He was 89.

Albert served as a staff sergeant in the Army during World War II. He then came to Princeton but left the University after six months. He lived in Tabb, and then in Yorktown, both in Virginia. Albert did not keep up with the class, and we have no information on his subsequent career and other activities.

His wife, Katherine Bailey, predeceased him. He was survived by his daughter, Melanie L. Bailey, and a granddaughter, Caitlin Costello. Our condolences go to them, as well as our regret that we did not get to know this man better.



##### Robert A. Crosby Sr. '49

Bob Crosby died Oct. 28, 2012, at his home in Jacksonville, Vt.

Bob was born July 21, 1924, in Springfield, Mass.

He graduated from Classical High School in 1942 and from Mount Hermon School in 1943. War took him into the Navy, to the Normandy landings, and to OCS. The Navy V-12 program brought him to Wesleyan University and then to Princeton. After his honorable discharge in 1945, Bob returned to Wesleyan to earn his bachelor's degree in 1949.

Bob had a career in sales in the textile industry. He worked for a time for Berkshire Fine Spinning Associates and then joined Springs Mills Inc., becoming a vice president of the company. He and his wife, Luanne Mace Crosby, were active in many community causes, particularly the Deerfield Valley Health Center. Before retiring to Jacksonville in 1985,

they lived in Stamford, Conn. Bob loved his golf wherever he was.

Luanne survives him, as do their three children, Diane, Robert A. Jr., and Peter, and several grandchildren. The class extends its sympathy to them all.

##### Jacques H. Houdry '49

Jacques Houdry of West Palm Beach, Fla., died Feb. 6, 2012, at the age of 86.

Jacques was born in Paris, the son of Eugene Houdry, the inventor of the catalytic-cracking process of oil refining to produce high-octane gasoline. Jacques attended the Hill School, Episcopal Academy, and MIT. He served in the Army for two years.

Jacques then found his way to Princeton, where he was captain of the golf team and was by far the class's best golfer. He played in seven majors during his amateur golf career and broke the course record at Merion Golf Club in 1950 with a 63. He loved Paris, fine wines, and good food, and knew a lot about them.

Jacques became president and chairman of Oxy-Catalyst, the firm founded by his father. The company pioneered the development of catalytic exhaust purifiers for motor vehicles.

He leaves his wife, Dorothee (usually known as Dotti); daughters Trish Stanley and Barbara Sabo; a granddaughter, Nina Casey; a grandson, Spencer Stanley; and one great-grandchild. We send our condolences to them.

##### Walter G. Huber '49

Walter Huber, always known as Pat, died Nov. 12, 2011, at his home in Petoskey, Mich.

Pat was born June 4, 1927, in New York City. After Millbrook School and two years in the Navy as an electronics instructor, he came to Princeton. He belonged to Quadrangle Club and graduated *magna cum laude* with a degree in electrical engineering and membership in Phi Beta Kappa.

In 1992, Pat retired from Illinois Tool Works as general manager of the cutting-tool division. He and his wife, Penny, who were married while he was still an undergraduate, then retired to Alanson, Mich., to a house designed by their architect son, John Whitney Huber '73 \*76. They called it Tilwoth. He and Penny supported good causes wherever they lived and served in a number of leadership positions.

Pat liked to ski, sail, and share his humor and positive outlook on life with others. To Penny and Whitney, the class sends sympathy. Son Walter G. Jr. predeceased them.

##### Ezra B. Sharp '49 \*51

Ezra Sharp died Oct. 27, 2011.

Ezra was born April 22, 1928, in Philadelphia and came to Princeton from Moorestown High School. Several of his relatives were Princeton graduates. He majored in basic engineering and played 150-pound football and interclub



sports. He waited on tables in Commons and joined Key and Seal Club. He roomed at 154 Witherspoon with Russell E. Randall Jr.

Ezra stayed on at Princeton to earn a master's degree in engineering, then spent 27 years with Union Carbide in manufacturing management. He then retired to raising Christmas trees in New Jersey, hunting in Pennsylvania, and fishing in Florida, where he had a retirement home in Cedar Key.

Ezra never married. He is survived by a best friend, Dorothy A. Overk, to whom the class extends its condolences and best wishes.

**Charles F. Warnath '49**

Charles Warnath succumbed to pneumonia Dec. 16, 2011.

Charles was born April 17, 1925, in Philadelphia and attended Germantown Academy. When war came, and as soon as he was old enough, he joined the Marines. Honorably discharged in 1946, he came to Princeton on the G.I. Bill. He joined Prospect Club, managed the ice hockey team, and graduated in 1949 with a degree in psychology.

Charles earned a Ph.D. in counseling psychology at Columbia University in 1954. While in graduate school he met and married Maxine Ammer, who survives him.

He became a professor of psychology and counseling at the University of Oregon in Corvallis. As the author of numerous books and articles on counseling, he became a leader in the development and improvement of his profession. In his early 50s he was blinded by retinitis pigmentosa. With his seeing-eye dog he kept on going, and his writings became focused on problems of dealing with disabilities.

To Maxine; their children, Cindy Barrios and Stephen; and granddaughters Jeannette and Alexa, the class extends its sympathy on their loss of this achieving and resilient man.

**THE CLASS OF 1952**



**William P. Carey '52**

An entrepreneur and philanthropist, Bill came to the class from Pomfret. He roomed with Biddle Worthington and Frank Peard freshman year, and then transferred to Penn, from which he graduated in '53.

In 1973, Bill founded W.P. Carey & Co., which became a leader in sale and leaseback real-estate operations. Now listed on the NYSE, it manages about \$12 billion in assets.

Bill hosted the first of a series of occasional '52 luncheons in New York and handed around his business card, which mentioned the W.P. Carey School of Business at Arizona State University in Tempe. When asked about it, he

said, "My grandfather went from Virginia to the Arizona Territory, and when it became a state they gave him Tempe."

In 1988 he founded the W.P. Carey Foundation and later made substantial gifts for the Francis King Carey School of Law at the University of Maryland (named for his grandfather) and to launch the Johns Hopkins University James Carey School of Business.

Bill died Jan. 2, 2012, in West Palm Beach, Fla., from heart disease. His memorial service at St. Thomas Church in New York included statements by Mayor Michael Bloomberg and Maryland Gov. Martin O'Malley.

He is survived by his brother, Francis J. '47, to whom the class offers its sympathy.



**John J. Clutz Jr. '52**

John died April 22, 2013, in Wayne, Pa.

John entered Princeton on an NROTC scholarship. He majored in basic engineering and belonged to Dial Lodge. His major extracurricular activity was singing (Glee Club, Octet, and Chapel Choir).

John spent three years in the Navy. In December 1953, taking advantage of six months ashore at submarine school, he married Patricia ("Patty") Sweet, a Penn graduate, after seven years of courtship. They had no children, but compensated with six dogs. Patty died in 2011.

John worked in manufacturing and corporate management, mostly with the Rohm and Haas Co. based in Philadelphia. He became president of Rohm and Haas Canada and its Latin American industrial-business director. In 1978 he narrowly survived a dissecting aneurysm of the aorta, which forced him into early retirement in 1990.

Jay Sherrerd asked John to direct the 1991 Philadelphia mini-reunion. This led to 15 years as class treasurer, five as vice president, and then John's election as president at our 60th reunion. He served as treasurer for four major class reunions. He was the longest-serving elected class officer.

John sang for 25 years with a small mixed a cappella group and was active with the Wayne Oratorio Society.

His brother, Richard Clutz '56, survives him.



**Henry S. Jeanes III '52**

Harry Jeanes, the son of Henry Jr. '27, came to the class from St. Paul's. He majored in geology, joined Cap, and rowed on the 150-pound crew. He was in NROTC and roomed with Sam Ewing.

After graduation, Harry served as a lieutenant junior grade (and stayed in the Navy Reserve to make lieutenant), then, following his dream of becoming a farmer, earned a degree in agronomy at UC, Davis in 1961.

He bought a farm near Mercersburg, Pa., where he raised sheep, livestock, and hay, as well as three children. He served as supervisor of Warren Township and as a vestryman and delegate to the Diocesan Convention of the Episcopal Church. As he reported in the *Book of Our History*, he read widely, kept in touch with classmates, and showed up for '52's reunions.

Harry died Jan. 9, 2014, in York Harbor, Maine, where he had spent many summers. He leaves his sister, Carol Hollingsworth; his brother Marshall; and his former wife, Shirley A. Jeanes, and their children, Grace, Amity, and Henry S. IV. The class offers sympathy to them all and a salute to Harry for his service to our country.



**Richard K. Orr '52**

Dick died Nov. 25, 2013.

International oilman and friend of parolees, he came to Princeton from Blair Academy, majored in history, and joined Elm. He left sophomore year for Army OCS and served until 1954. He returned to Princeton, winning a Hibben scholarship and graduating with the Class of 1957 as a member of Phi Beta Kappa.

Dick held a range of jobs with international responsibilities at Exxon Corp. until he retired in 1993. In retirement he started a nationally recognized program for mentoring parolees and probationers.

Dick's wife, Setsuko, died in 2011. He is survived by two sons, Richard and Michael, to whom the class offers condolences, with appreciation of their father's service to society and to our country.



**George W. Young '52**

George died Feb. 17, 2013.

He came to the class from Salisbury, where he was later a trustee and headed the alumni association. At Princeton he majored in history and oriental languages. He joined Cloister Inn and Whig-Clio, and roomed with Bill Coler. After graduation he joined the Army and served from 1950 to 1952, retiring from the Reserve in 1960 as a second lieutenant.

George worked at J.P. Morgan & Co. from 1964 until he retired in 1986 as vice president and chairman of the departmental credit committee. He was a vestryman at Christ & St. Stephen's Episcopal Church and St. Ignatius of Antioch Church in New York. He served as treasurer of the U.S. Conference of the World Council of Churches and also was active in a number of charities in the city.

The class offers its sympathy to George's niece, Jessica Lanier; and his nephews, Ian and Ross Lanier, children of his sister, Jane, who predeceased him.

**THE CLASS OF 1955****Carter R. Buller '55**

Carter Buller, son of William E. Buller, was born April 21, 1933, in Allentown, Pa., and prepared at Allentown High School.

He was in SPIA and joined Campus Club. He roomed at 35 Patton with Phil Gladfelter and Dave Fulmer. He served three years in the Navy and graduated from Yale Law School.

He spent 52 years practicing law with Montgomery McCracken. A partner, Carter served four years as chair and was particularly proud to represent Bryn Mawr, Budd Co., and Mack Trucks, whose plant was near his boyhood home. Active in civic life, Carter chaired various organizations and received the 1998 Dr. Scott Stewart Award for service from Methodist Hospital. He was a trustee emeritus of Thomas Jefferson University Hospital.

Carter enjoyed his summers kayaking and socializing at the family cottage in Eagles Mere, Pa. A noted horseman, Carter and his mount Stay Put served as an alternate for the U.S. equestrian team in the 1960 Olympic games. His avocations included world travel, historic preservation, music, antiques, farms, and fine clothes. He was refined, generous, honest, patient, funny, and gentle.

Carter died Jan. 8, 2014, of kidney failure. To his wife, Jo Ann; daughter Valerie; son Pierce; two granddaughters; and a brother, the class extends sympathy.

**Noel Richard Hueber Jr. '55**

A fount of tireless exuberance and a committed Tiger booster, Dick was born Oct. 29, 1932, in Syracuse, N.Y., the son of Noel

Richard Hueber.

He prepared at Phillips Andover and majored in politics at Princeton. A member of Campus Club, Dick won numerals in freshman lacrosse and football, and a major "P" as varsity basketball manager. Senior year, he roomed with Ray Freeman. He served two years in the Marine Corps.

Dick's interests included supporting Democrats and restoring historic houses (an interest that continued in his work on Campus Club). Another interest, running, led to his 19 1/2-year marriage to comely long-distance runner Rita Alles. From their townhouse in Hamilton, N.J., the couple enjoyed each other and the activities of their 17 grandchildren.

Nobody could match Dick's enthusiasm for all things Tiger, and his voluble appreciation set the standard for ensuring one's viewpoint is heard. Dick's 81st birthday was Oct. 29. On Oct. 28, after a long day, he came home and, while Rita was preparing the evening repast, fell to the floor, never to arise. It was a massive stroke

and he died Oct. 31, 2013. To his survivors, thanks from the class.

**John C. Skilling '55**

John Skilling was born Aug. 20, 1933, in Baltimore to Marion Bernard and John Edward Skilling and died Nov. 6, 2013, at his home in Naples, Fla.

He prepared at St. Albans. At Princeton he majored in biology and joined Tower Club. After service with the 3d Marine Division at Camp Pendleton, John graduated in 1961 from Hahnemann Medical College in Philadelphia. Completing his internship and residency at Washington (D.C.) Hospital Center in 1966, John entered private practice. In 1968 he became a partner in a practice that embodied the motto "Princeton in the nation's service" by delivering more than 3,000 babies.

A diplomate of the American Board of Obstetrics and Gynecology, John led Georgetown University-sponsored medical students to study and provide medical training in refugee camps in Thailand in 1980 and 1981. He was a member of the Chevy Chase Club.

John is survived by Nancy, his wife of 17 years; sons John and James; daughters Anne Lawrence and Sara Bernard; and grandchildren Katherine, Kyle, and Grant Skilling, Jennifer Berney, and Zoe and Emma Lachewitz. His sister, Nancy Skilling Littlehales, died in 2013. To John's family, the class sends sympathy.

**THE CLASS OF 1956****Marshall T. Rice '56**

Marshall died peacefully Dec. 14, 2013, at home in Rhode Island.

Born and raised in South Orange, N.J., he graduated from Kent (Conn.) School. A politics major at Princeton, he was a member of Cap and Gown. His senior roommates were Dick Clark and Collins Denny III.

He went on to graduate from General Theological Seminary in New York City as an Episcopal priest and served in several New Jersey parishes. In the 1980s and 1990s, he founded Marshall Rice Associates, an executive-search consulting firm specializing in not-for-profit organizations. Retiring to Rhode Island, he served as deployment officer for the Episcopal Diocese of Rhode Island, interim rector of Trinity Church in Newport, and as retired associate clergy at Christ Church in Westerly.

Active in the 1960s civil-rights movement, he was proud to have been with Dr. Martin Luther King in the 1963 March on Washington as president of the New Jersey Chapter of the Episcopal Society for Cultural and Racial Unity.

One Princeton classmate wrote: "He was a person who had the less fortunate, the

ostracized, the disaffected, and the poor close to his heart, and his career reflected this passion."

Marshall was a devoted husband to his beloved wife, Betsey, who survives him along with his three children, two stepchildren, six grandchildren, and three step-grandchildren.

**THE CLASS OF 1969****David E. Winter '69**

The Class of 1969 sustained the loss of a distinguished classmate with the Aug. 17, 2013, death of David E. Winter.

A Californian, Dave graduated from Woodrow Wilson High School in Long Beach, where he played the bassoon and was in the All-City High School band. After graduating from Princeton as an art history major, he earned a master's degree and a doctorate in art history at Stanford. He taught at the University of Virginia until 1980, and then became a lecturer at Stanford while teaching English as a second language in California's Cupertino Union District. In 1987, he relocated to Tokyo, where he lived for the remainder of his life, teaching English and art history at five different Japanese universities.

Dave blended a great sense of humor with a keen intellect. Although he never married and had no children of his own, he was very close to his brother Hugh's three children and devoted to his mother, Julia Elizabeth Winter. To them all, we send our sympathy at this time of loss.

**THE CLASS OF 1979****Carlos G. Anzaldúa '79**

Carlos Anzaldúa died April 20, 2012, in McAllen, Texas, after a long illness. He was 56.

The son of José and Criselda Anzaldúa, Carlos attended Phillips Academy Andover before matriculating at Princeton, where he earned a bachelor's degree in history.

Carlos received a master's degree in fine arts from the University of California at San Diego. There, he produced films on topics relating to Latin America and immigration, including the 1985 *Welcome to Watsonville*, a film that explored immigration and the lives of documented migrant field workers who traveled each year from their homes in Mexico to California to seek employment during the summer vegetable harvest. In our 25th-reunion yearbook, Carlos listed his occupation as "writing/editing."

He is survived by his parents and siblings José, Mario, and Gloria Anzaldúa. The class sends condolences to them and Carlos' friends.

**Christopher H. Howe '79**

Chris Howe died March 10, 2012, in Washington, D.C., after an illness.

Originally from Bethesda, Md., Chris attended St. Albans School with '79ers John



Kern and Bill Powers, each of whom roomed with Chris while at Princeton; they remained lifelong friends. At Princeton, Chris played football and majored in politics.

Chris was a longtime employee of Daymon Worldwide, a global, private-label consumer-products company, and spent many years for Daymon in South Korea and London. Colleagues described him as a caring mentor and innovative thinker with a great sense of humor, “a brilliant, serious man who never took himself too seriously.”

According to Bill Powers, “Chris loved following the markets, macroeconomics, and government policy. He had a sharp mind and a keen sense of humor and found fun in almost all endeavors and situations.” An avid sports fan, Chris loved the Washington Redskins.

John Kern said, “Princeton and Princeton football meant a lot to Chris. He was always private, yet he reveled in the opportunity to spend time with his classmates. He was happiest among old friends.”

Chris, who was single, is survived by his father, Jerald Sr.; brothers Jerry '78 and J. Michael; and many family members and friends. We extend our sympathy to them all.

#### GRADUATE ALUMNI

##### John W. Landis \*48

John Landis, a pioneer in the peaceful uses of atomic energy, died March 16, 2013. He was 95.

Landis graduated *summa cum laude* in 1939 from Lafayette. After serving in the Navy he studied physics at the Princeton graduate school, but did not complete a degree. In 1950, he joined the Atomic Energy Commission and helped design nuclear power plants.

In 1953, Landis joined the Atomic Energy Division of the Babcock & Wilcox Co., and became head of its center for nuclear research. He contributed to the design of the Indian Point, N.Y., nuclear power station. In 1968, he joined Gulf General Atomic Co. of San Diego, and in 1971 became its president.

From 1975 until he retired in 1993, Landis was a senior vice president and director of Stone & Webster Engineering Corp. in Boston. He was also president of Stone & Webster International. In 1996, he was named an “international nuclear statesman” when he received the American Nuclear Society’s Henry DeWolf Smyth ('18 \*21) Award.

Landis was predeceased by Muriel, his wife of 61 years, in 2002. He is survived by two daughters, four grandchildren, and three great-grandchildren.

##### Guthrie S. Birkhead Jr. \*51

Guthrie Birkhead, the eminent dean emeritus of Syracuse University’s Maxwell School of Citizenship and Public Affairs, died July 22,

2013. He was 92.

Between earning a B.A. (1942) and an M.A. (1947) from Missouri, Birkhead was a combat infantry officer in Gen. Patton’s Third Army. With a Princeton master’s degree (1949), he joined the Maxwell faculty in 1950 and completed his Princeton Ph.D. in politics in 1951.

He was promoted to full professor of political science in 1960. Active in public policy in New York, he played a key role in local government at the 1967 New York State Constitutional Convention. In 1983-84, he was chair of the platform committee of the New York State Democratic Party under Gov. Mario Cuomo. He also led initiatives on conservation and water administration.

Birkhead became Maxwell’s dean in 1977, retired in 1988, but continued teaching on the faculty. Many of his students had prominent careers in public service and as professors. A writer and editor of numerous books and research studies, he was described as a man of modesty and integrity with unfailing humanity.

He is survived by Louise, his wife of 60 years; three sons, including Guthrie III '75; and five grandchildren.

##### Edward W. Bodnar \*58

Edward Bodnar, professor emeritus of classics at Georgetown University, died Nov. 29, 2011. He was 91.

A priest for 59 years, he graduated from St. Louis University with a bachelor’s degree in 1944, and with a master’s degree in 1946. In 1958, he earned a Ph.D. in classics from Princeton. He taught in Georgetown’s classics department from 1967 until he retired in 1991.

Bodnar had been a mentor for many students and faculty, and remained a presence within the classics department and the Catholic community after his retirement.

According to Associate Professor Catherine Keesling, Bodnar played an integral role in the development of the classics program. She said, “For years, he *was* the classics department.” Annually, the Georgetown classics department has presented the Bodnar Lecture featuring a renowned classics scholar, which continued after his passing.

In an email announcing Bodnar’s death, Georgetown’s Provost James O’Donnell wrote that Bodnar “will be remembered by many, including a provost for whom he has been his ‘oldest’ Georgetown friend, dating from our meeting in Woodrow Wilson’s [Washington] living room 35 years ago.”

##### L. Douglas Kinnard \*73

Douglas Kinnard, retired Army brigadier general and professor emeritus of political science at the University of Vermont (UVM), died July 29, 2013. He was 91.

Kinnard graduated from West Point in 1944, and was awarded a Bronze Star for action with

Gen. Patton’s Third Army in Germany. He also fought in the Korean War, earned a master’s degree in politics from Princeton in 1957, and between two tours in Vietnam, was promoted to brigadier general.

After retiring in 1970, Kinnard returned to Princeton and earned another master’s degree in 1972 and a Ph.D. in 1973. He then received a tenure-track position in UVM’s political science department. He published works on Vietnam and the Eisenhower presidency. His book *The War Managers* was a critical analysis of political leadership and generals on Vietnam. Kinnard became emeritus in 1984. In 1994, President Bill Clinton appointed Kinnard to help plan and supervise the World War II Memorial on the National Mall.

In 2001, Kinnard published *From the Paterson Station: The Way We Were*, a memoir of his earlier years. In 2012, he completed his memoirs with *Adventures in Two Worlds: Vietnam General and Vermont Professor*.

He is survived by his wife, Dr. Wade Tyree \*79, and a son.

##### Patricia M. Troxel \*86

Patricia Troxel, associate professor of English emeritus at California Polytechnic State University in San Luis Obispo and a noted theater director, died April 21, 2013, from breast cancer. She was 56.

Troxel earned a B.A. in 1978 from Whitman College and an M.A. from UC, Davis in 1981. In 1986, she received a Ph.D. in English from Princeton. At the University of Kentucky, she was an assistant professor of dramatic literature, and she served on the literary staff of the Actors Theatre of Louisville. She directed, developed, and produced new plays for several venues, as well as programs in the arts and education.

Going to California in 1991, Troxel joined PCPA Theaterfest as a conservatory instructor and dramaturge. In 22 seasons she directed dozens of productions, as well as dramaturgy for more than 55 plays.

She also was active in regional Shakespeare festivals in Oregon and Utah, in addition to working with theater organizations in the U.K. and the United States. Troxel authored critical studies on classical and contemporary dramatists, including Shakespeare, Ferenc Molnár, and Tom Stoppard.

Mark Booher, PCPA’s artistic director, said Troxel’s “vibrant artistry, superlative intelligence, and tremendous kindness have left an indelible, affirmative, and powerful legacy.”

*Graduate memorials are prepared by the APGA.*

*This issue has undergraduate memorials for Howard P. Brokaw '38 \*39 and Ezra B. Sharp '49 \*51.*

# Classifieds

## For Rent

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**Paris, SW France, Provence, Italy:** Apartments, homes, chateaux. www.FrenchHomeRentals.com, FHR@earthlink.net

**Provence:** Delightful five-bedroom stone farmhouse, facing Roman theater. Pool, WiFi. 860-672-6607. www.Frenchfarmhouse.com

**Paris, Left Bank:** Elegant apartment off Seine in 6th. Short walk to Louvre, Notre Dame. 609-924-7520, gam1@comcast.net

**Paris, Marais:** Elegant, 2 bedroom, 2 bath apartment, vibrant Pompidou museum/sidewalk café quarter on 13c pedestrian street, full kitchen, w/d, AC, cable. desaix@verizon.net, 212-473-9472.

**Florence Country house** on 54 mountain acres. Fantastic views. \$100/day. www.ganzitalianhouse.com E-mail: gganz@comcast.net

**Rome Historic Center:** 2-4 bedrooms. Elegant and spacious. All modern conveniences, including Wi-Fi. 503.227.1600; tkim@stollberne.com

**France, Paris-Marais:** Exquisite, sunny, quiet one-bedroom apartment behind Place des Vosges. King-size bed, living/dining room, six chairs, full kitchen, washer, dryer, weekly maid service, WiFi, \$1350 weekly. 301-654-7145; max@gwu.edu

**Central apartments** in Saint Petersburg, Buenos Aires, Bulgaria, Princeton, Miami. japter@princeton.edu

**Paris:** 'Sunny, Chic, & Fabulous' — Luxury 2BD/2BA apartment steps from the Louvre. Renovated by top Parisian designers and featured on HGTV's House Hunters International. Sleeps up to 5. Ashley Maddox '94, www.WhereIdStay.com

**Paris:** Ile St. Louis, elegant top-floor apartment, elevator, updated, well-appointed, gorgeous view. Sleeps 4, maid 3x week. WiFi, TV etc. Inquiries triff@mindspring.com, 678-232-8444.

**Paris 13th:** 2BR apartment near Seine, Bibliotheque Nationale. Great restaurants, shopping, cinema. 603-924-9535. gloward@gmail.com, www.frenchconnections.co.uk/en/accommodation/property/158162

**Italy/Todi:** Luxurious 8BR, 7.5BA villa, amazing views, infinity pool, olives, lavender, grapes, vegetable garden, daily cleaner, WiFi. For photos/prices/availability: VRBO.com, #398660. Discount Princeton affiliates. 914-320-2865. MarilynGasparini@aol.com, p'11.

**Paris, Tuileries Gardens:** Beautifully-appointed, spacious, 1BR queen, 6th floor, elevator, concierge. karin.demorest@gmail.com

**Apartments and Villas in Rome:** Save up to 50% on a Hotel fee! (+39) 06 99329392; www.rentalinrome.com

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**Bermuda:** Lovely home — pool, spectacular water views, located at Southampton Princess. Walk to beach, golf, tennis, restaurants, shops, spa, lighthouse. Sleeps 15. ptigers@prodigy.net, '74.

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**Stone Harbor, NJ:** On beach, upscale. 570-287-7191. E-mail: radams150@aol.com

**Sugarbush/Warren, Vt:** 3 BR/2.5 BA condo minutes from ski area. Sleeps 8. Free shuttle service or short walk to ski-on access. 212-496-6528 or suzannezywicki@hotmail.com

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**Oyster Harbors, MA:** July and August, 5BR, 5BA home near Oyster Harbors Club, off of golf course. Huge eat-in kitchen, dining room, den, and living room. Prefer monthly rental (\$30,000/month), will consider 2-week blocks. Pets allowed if house broken, no smoking. hopecigleheart@gmail.com, k'45.

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**Southampton Village:** 3BR historic home with modern amenities. Private garden, outdoor dining, walk to shops, bike to beach. Available July–Labor Day. 631-283-5487, lorena.strunk@gmail.com, k'70.

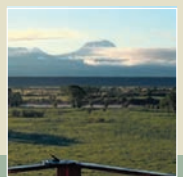
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**Taos, New Mexico:** 2 bedroom / 2 bath

## Classifieds

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**PRINCETON  
ALUMNI WEEKLY**

LETTER TO THE EDITORS –  
*THE NEW YORK TIMES MAGAZINE*

### PROFESSIONAL FAILURE

Re: "Journey to the Center of the World",  
NY Times Magazine, 23 February 2014.

Dear Editors:

In my opinion, despite a well written article, you failed professionally.

Let me explain:

Quietly, over a quarter century, the Museum of History in Granite evolved. It is the only one on this planet. It does not advertise. Comments from notables include "*Worthy of the Pharaohs*" and "*..an extraordinary monument to all humankind,.. done so with class and thoroughness.*"

The States of Arizona and of New Hampshire apparently agree since both officially requested that the Museum of History in Granite become a World Heritage Site.

Granite monuments tell the history of Humanity, of the United States and of other subjects. There is still an untold story here.

Since scholarship apparently did not suffice, you opted wrong-headedly for the sensational.

You unearthed a whimsical thirty year old idea "Center of the World" and used it inaccurately to describe the Museum of History in Granite. In the process, you relegated a fine museum to a roadside attraction.

A pyramid built 28 years ago to illustrate a children's fable is not part of the museum, whose aim is education. The museum carefully separates whimsy and scholarship. Harping on whimsy, you did not.

As for describing me as "weird, wonderful and old", weird is insulting and damages by implication our educational efforts; wonderful is condescending, particularly when following weird, and old, as you see here, is not applicable to my frame of mind.

Trusting you will consider running a tabloid, I am,

Yours sincerely,  
Jacques-Andre Istel  
7 March 2014

A crowd greeted Fidel Castro at the Princeton Junction train station. Below, after speaking at a conference on campus, Castro stopped to talk with students and others on Washington Road.



## Guerrillas on Washington Road

W. Barksdale Maynard '88

Young Fidel Castro briefly was the darling of many Americans, who were thrilled that the charismatic revolutionary had ousted a dictator and promised democracy throughout Latin America. A crowd of 1,500 shouted “¡Viva Fidel!” when he visited the University during a U.S. tour, three months after seizing power in Cuba.

Three hundred invited guests gave the 32-year-old guerrilla fighter a standing ovation when he spoke in Corwin Hall at a conference of the American Civilization Program. He and his entourage were a strange sight in the Ivy League, with their combat fatigues and disheveled beards.

In a quiet voice, the former lawyer spoke of freedom and lofty ideals for more than an hour. When someone asked why no elections had been scheduled, he promised



to hold them “as soon as possible, so that we can be an example of democracy, equality, and social justice.”

The Eisenhower administration worried he might be a Communist. “I advise you not to worry about Communism in Cuba,” Castro reassured the Princetonians — his only “ism” was humanism.

Police whisked Castro out the back door and into a limousine that turned

downhill on Washington Road. But the revolutionary ordered his driver to stop, and he leapt out to address the undergraduate throng.

Elated that night was Paul Taylor '60, who had invited Castro to campus on behalf of Whig-Clio. Today, 55 years into the Castro dictatorship, the former U. S. ambassador to the Dominican Republic sees him differently: “He didn’t turn out to be what we hoped he would be.” ♦

AP Images/Harry Harris; The Daily Princetonian/William F. Burrow Jr. '61



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