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The Tech

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WEATHER, p. 2

WED: 25°F | 13°F Clear

THU: 29°F | 24°F Sunny

FRI: 35°F | 26°F Overcast

3.091 to return to traditional lecture format

Prof. Cima says edX trial results 'not yet conclusive'

By Tiffany A. Chen
STAFF REPORTER

3.091 is reverting back to its original format of lecture/recitation as the semester-long experiment comes to an end. Findings from the experiment are not yet conclusive, 3.091 Professor Michael J. Cima stressed in an email to The Tech; the full report to the Committee on the Undergraduate Program is due at the end of February.

The experiment took elements from Cima's 3.091 course on edX, a massive open online course platform developed by MIT and Harvard, and translated them to classroom learning. Before each lecture, students were instructed to watch online learning sequences. Instead of p-sets, midterms, and a final, students in 3.091 took a series of 37 online assessments throughout the semester.

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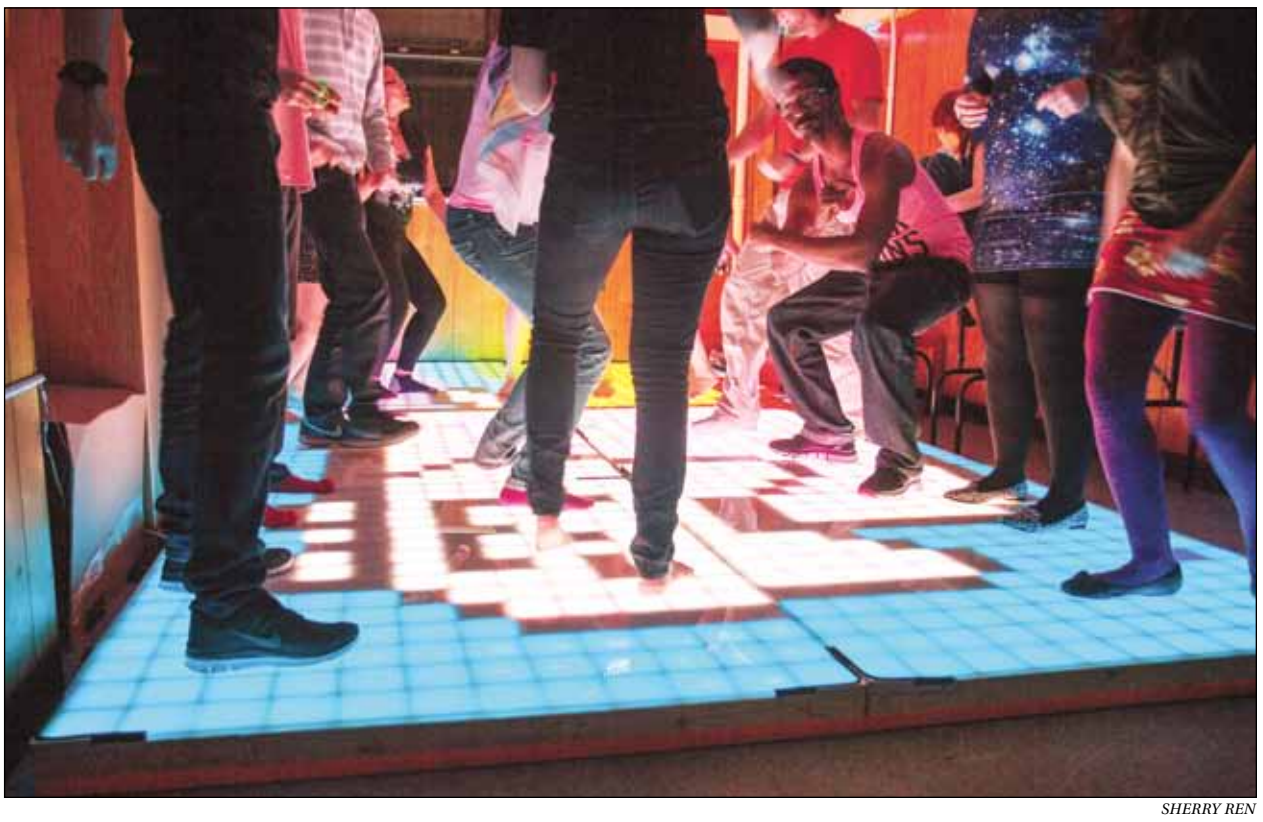

SHERRY REN

Residents of First East kick off the Bad Ideas Ball in East Campus on Sunday, Jan. 26 by celebrating the completion of a Disco Dancefloor. The dancefloor took well over a thousand man hours to construct and was funded by CAMIT, Techfair, Bad Ideas, and alumni donations.

NEWS BRIEFS

Dean of School of Architecture and Planning steps down

Yesterday, Adèle Naudé Santos, dean of MIT's School of Architecture and Planning (SA+P) announced her intention to step down and return to faculty, effective at the end of the Spring semester. Santos is a professor in both the Department of Architecture and the Department of Urban Studies (DUSP), as well as a practicing architect with her own architecture studio in San-Francisco, Santos Prescott and Associates.

During her ten-year tenure as dean, Santos worked to consolidate the School of Architecture into two central locations, overseeing renovations in MIT's Main group and a crucial fundraising campaign for the Media Lab. Santos also worked to increase the visibility of the School and made several high-profile hires for the department.

Suggestions for the next dean of SA+P can be sent by email to *sap-search@mit.edu* or by letter to Room 3-240.

New incoming director of Beaver Works

Effective February 1, Robert T-I. Shin '77, current division head of the Intelligence, Surveillance, and Reconnaissance (ISR) and Tactical Systems Division at MIT Lincoln Laboratory, will assume the role of Director of the MIT Lincoln Laboratory Beaver Works Center. Shin will also be a member of the MIT School of Engineering Extended Engineering Council.

Beaver Works, located at 300 Technology Square, was established in November 2013 as a joint research laboratory by the Lincoln Laboratory and the School of Engineering. The space is operated by Lincoln Laboratory and provides space for students, faculty, and researchers from MIT and Lincoln Laboratory to collaborate on research projects.

Course 1 professor wins prestigious NSF award

Pedro Reis, Assistant Professor of Civil and Environmental Engineering and Mechanical Engineering has won a 2014 Early Career Award from the National Science Foundation's Structural Mechanics and Materials program, according to the MIT News Office. The award is the NSF's most prestigious award for assistant professors early on in their career.

Reis is the Principal Investigator in the Elasticity, Geometry, and Statistics Laboratory, where research focuses on understanding the mechanics of thin objects and structures. With the Early Career Award, Reis, will continue the research in his "Smart Morphable Surfaces for Aerodynamic Drag Control" project, with the goal of developing a new class of Smart Morphable Surfaces that can acquire reversible and on-demand customizable typography, according to his award abstract. Applications include radomes (domed structures that protect radars), wind turbine towers, automobiles and aircraft structures.

—Deborah Chen

OBITUARY

The life of Prof. Robert A. Alberty

By Liz McGrath
DEPARTMENT OF CHEMISTRY

Robert A. Alberty, professor emeritus in the Department of Chemistry and former dean of MIT's School of Science — whose seminal contributions to the thermodynamics and kinetics of biochemical reactions are still at the forefront of chemistry — passed away on Saturday, Jan. 18, at the age of 92.

A member of the MIT faculty since 1967, Alberty led the School of Science from 1967 to 1982, when he returned to teaching and research in physical chemistry. He became professor emeritus in 1991.

"Bob's characterization of enzyme kinetics from 1955 to 1965 remains the model for investigations of enzymatic mechanism," says chemistry department head Sylvia Ceyer, the J. C. Sheehan Professor of Chemistry. "His work is well-known for its utmost attention to detail, and despite being a demanding scientist, he was the quintessential gentleman — always kind and warm-hearted."

Alberty's work placed the kinetic model by Leonor Michaelis and Maud Menten some 30 years earlier on a firm theoretical basis, Ceyer says, by describing the interplay between kinetics and equilibrium. He was also the first to recognize the complexity of the many species of adenosine 5'-triphosphate (ATP), she adds, and to develop a rigorous, but easily generalizable, thermodynamic treatment to relate them.

Alberty was widely regarded by MIT colleagues as an accomplished educator at both the undergraduate and graduate level. Many of his students and postdocs went on to pursue outstanding research careers; he was particularly proud of those who became members of the National Academy of Sciences — a status he himself achieved in 1965.

Alberty was the author or co-author of physical chemistry textbooks that are widely used to this day. Physical Chemistry (Wiley), a textbook he co-authored with Farrington Daniels in 1955, was his most esteemed and enduring work. Alberty's refinements to the book spanned more than 50 years, during which time he and his co-authors — most recently Moungi Bawendi and the late Robert J. Silbey, both professors at MIT — updated the volume to meet current trends and standards. Physical Chemistry is still considered the benchmark textbook in the field, and is used in teaching 5.60 (Thermodynamics and Kinetics) in MIT's Department of Chemistry.

"I had the pleasure of watching Professor Alberty — Bob to everyone here — in action during the updating of the Physical Chemistry textbook," says Bawendi, the Lester Wolfe Professor of Chemistry. "Bob was tireless and incredibly organized. He knew the contents of the

Alberty, Page 14

IN SHORT

***The Tech* will resume its normal publication schedule (Tuesdays and Fridays) starting Tuesday, Feb. 4.** Looking forward to another good semester!

Quarter 3 P.E. Registration for undergrads opens at 8 a.m. today! Go to *mitpe.com* to sign up!

There will be a memorial service celebrating the life of Ann Wolpert, director of the MIT Libraries from 1996 to 2013, on Friday at 3 p.m. in 10-250 followed by a reception in Barker Library.

The memorial service for Charles Vest, former MIT president from 1990 to 2004, will be held on March 6 at 4:30 p.m. in Kresge. The National Academy of Sciences will also be holding their own memorial service for Vest on February 20 in Washington.

The Community Service Fair is Tuesday, Feb. 4 in Lobby 10, 12–3 p.m.! Stop by and find a community service opportunity with the help of the PSC.

Regular meal plan service for the Spring semester resumes Saturday with brunch! Let there be food!

Send news information and tips to *news@tech.mit.edu*.

CHARM SCHOOL'S DIRECTION

Has IAP Charm School's focus shifted too much toward job seeking? **OPINION, p. 4**

DELICIOUS AND MEATLESS

Root is delightful even for non-vegetarians. **ARTS, p. 8**

TECHÉMON: FINAL INSTALLMENT

Q.E.D.'s ending to the limited IAP edition comic series *Techémon*. **FUN, p. 5**

MIT G&S: *THE FOREST OF EOREN*

MIT Gilbert & Sullivan Players prepare to perform a student-written production. **ARTS, p. 8**

BREAKING SILENCE

A personal account of sexual assault and beginning to recover. **CAMPUS LIFE, p. 15**

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Rebels in Syria claim control of resources

BEIRUT — Islamist rebels and extremist groups have seized control of most of Syria's oil and gas resources, a rare generator of cash in the country's war-battered economy, and are now using the proceeds to underwrite their fights against one another as well as President Bashar Assad, U.S. officials say.

While the oil and gas fields are in serious decline, control of them has bolstered the fortunes of the Islamic State in Iraq and the Levant, or ISIL, and the Nusra Front, both of which are offshoots of al-Qaida. ISIL is even selling fuel to the Assad government, lending weight to allegations by opposition leaders that it is secretly working with Damascus to weaken the other rebel groups and discourage international support for their cause.

Although there is no clear evidence of direct tactical coordination between ISIL and Assad, U.S. officials say that his government has facilitated the group's rise not only by purchasing its oil but by exempting some of its headquarters from the airstrikes that have tormented other rebel groups.

The Nusra Front and other groups are providing fuel to the government, too, in exchange for electricity and relief from airstrikes, according to opposition activists in Syria's oil regions.

The scramble for Syria's oil is described by analysts as a war within the broader civil war, one that is turning what was once an essential source of income for Syria into a driving force in a conflict that is tearing the country apart.

"Syria is an oil country and has resources, but in the past they were all stolen by the regime," said Abu Nizar, an anti-government activist in Deir el-Zour. "Now they are being stolen by those who are profiting from the revolution."

—Ben Hubbard, Clifford Krauss and Eric Schmitt, The New York Times

Palestinian leader says he can accept Israeli military in West Bank for 3 years

TEL AVIV, Israel — President Mahmoud Abbas of the Palestinian Authority said in an interview shown Tuesday that he could accept an Israeli military presence in the West Bank for a three-year transition period as part of a peace deal. But Abbas said "whoever proposes 10 or 15 years for a transition" was not serious about an agreement.

The question of who should be responsible for security, particularly in the Jordan Valley, and for how long, has been central in the U.S.-brokered peace talks between the Israelis and the Palestinians that started last summer.

Israel has long insisted that it could depend only on its own soldiers, not an international force, with some leaders suggesting that they might stay for 40 years or more. Palestinian officials have said they could not tolerate even a single Israeli soldier patrolling their future state, although they have acknowledged that some transition period would most likely be required.

"We say that a transition period not exceed three years, during which Israel will withdraw gradually," Abbas said in a videotaped interview shown at an Israeli security conference here, in his most specific recent public comments on the subject. "We are willing to allow a third party to take Israel's place during and after a withdrawal in order to soothe our concerns and Israel's." He suggested NATO as "the suitable party."

A spokesman for Prime Minister Benjamin Netanyahu of Israel declined to respond to Abbas' comments, and Netanyahu himself did not directly address them in his own speech Tuesday night at the conference, sponsored by the Institute for National Security Studies. But the prime minister said that "the Palestinian state must be demilitarized," and that any deal would require "security arrangements that are embedded in the hands of Israel so we will be able to secure ourselves and protect ourselves."

—Jodi Rudoren, The New York Times

In State of the Union, Obama vows solo action on economy

By Peter Baker
THE NEW YORK TIMES

WASHINGTON — After five years of fractious political combat, President Obama declared independence from Congress on Tuesday as he vowed to tackle economic disparity with a series of limited initiatives on jobs, wages and retirement that he will take without legislative approval.

Promising "a year of action" as he tries to rejuvenate a presidency mired in low approval ratings and stymied by partisan stalemates, Mr. Obama used his annual State of the Union address to chart a new path forward relying on his own executive authority. But the defiant "with or without Congress" approach was more assertive than any of the individual policies he advanced.

"I'm eager to work with all of you," a confident Mr. Obama told lawmakers of both parties in the 65-minute nationally televised speech in the House chamber. "But America does not stand still — and neither will I. So wherever and whenever I can take steps without legislation to expand opportunity for more American families, that's what I'm going to do."

The president's appearance at the Capitol, with all the traditional pomp and anticipation punctuated by partisan standing ovations, came at a critical juncture as Mr. Obama seeks to define his remaining time in office. He touched on foreign policy, asserting that "American diplomacy backed by the threat of force" had forced Syria to give up chemical weapons and that "American diplomacy backed by pressure" had brought Iran to the negotiating table. And he repeated his plan to pull troops out of Afghanistan this year and threatened again to veto sanctions on Iran that disrupt his diplomatic efforts.

But Mr. Obama's message centered on the wide gap between the wealthiest and other Americans as he positioned himself as a champion of those left behind in the modern economy. "Those at the top have never done better," he said. "But average wages have barely budged. Inequality has deepened. Upward mobility has stalled.

"The cold, hard fact is that even in the midst of recovery, too many Americans are working more than ever just to get by, let alone to get ahead," he added. "And too many still aren't working at all. So our job is to reverse these trends."

To do so, the president announced an executive order raising the minimum wage to $10.10 an hour for future federal contract workers and the creation of a new Treasury savings bond for workers without access to traditional retirement options. He proposed incentives for trucks running on alternative fuels and higher efficiency standards for those running on gasoline. And he announced a meeting on working families and a review of federal job training programs.

The most emotional point of the evening came with the introduction of Sgt. First Class Cory Remsburg, an Army Ranger the president had met both before and after he was ravaged by a roadside bomb in Afghanistan. As Sergeant Remsburg, blind in one eye and still learning how to walk again, made it to his feet in the first lady's box, lawmakers of both parties gave him an extended ovation.

House votes for tighter restrictions on federal payments for abortions

By Jeremy W. Peters
THE NEW YORK TIMES

WASHINGTON — The House of Representatives voted Tuesday to impose tighter restrictions on federal payments for abortions, thrusting the issue of a woman's right to terminate a pregnancy into the polarizing politics of an election year.

The bill stands no chance of being passed by the Democratic-controlled Senate. But that mattered little to members of both parties, who seemed to relish the chance to accuse their opponents of blatantly twisting the issue to their political advantage.

The House vote was 227-188, mainly along party lines. Six Democrats voted yes, one Republican voted no and another voted present.

"Here we go again," said Rep. Barbara Lee, D-Calif. "It's another battle in the war on women."

Republicans, bristling at accusations that they are hostile to women's rights, said Democrats were unfairly characterizing their motives. "I will say it again," said Rep. Virginia Foxx, R-N.C., irritation apparent in her voice, "we are not attacking women's health care."

Existing law like the Hyde Amendment, first enacted in 1977, already restricts federal financing for abortion services. But because the Hyde Amendment must be renewed every year, Republicans said their proposal would only codify what has been the law of the land.

Though the bill had solid support from the House Republican leaders, their unanimity during the vote Tuesday obscured tensions within the party.

Republicans have long sought to restrict abortion rights as a move to satisfy their social conservative base, particularly during election years. Just last week, Rep. Eric Cantor of Virginia, the House majority leader, spoke at the March for Life, an annual Washington protest by opponents of legalized abortion.

But the issue has become considerably more challenging for Republicans, both because of insensitive comments from Republican men, on and off the campaign trail, and an aggressive effort by Democrats to portray the party as anti-women.

The timing of the vote was telling. Notably, the House leadership chose to bring the measure up on a day when all of Washington, and much of the news, was consumed with President Barack Obama's State of the Union address. Republican leaders also decided to make the bill one of their first orders of business this year, disposing of it nearly 10 months before Election Day. A senior aide to Republican leadership said it would probably be the only time an abortion-related bill would come up this year.

WEATHER

Chilly temperatures continue

By Casey Hilgenbrink

Although we experienced a brief respite from the cold on Monday with afternoon temperatures reaching into the mid 40s°F, that relief did not last long thanks to another Arctic cold front sweeping across our area Monday evening. Behind the front, air temperatures in the teens combined with wind gusts of up to 28 mph led to bitterly cold wild chills below 0°F yesterday morning.

Unfortunately, Boston likely won't see any relief from the cold until the weekend. Last night and this morning, a low-pressure system tracked up the coast, and so there is a chance we may see some light snow this morning as the storm moves away from New England. Otherwise, skies will clear by early afternoon and we should see a high temperature of around 25°F (-4°C). On Thursday, a high pressure settles in to our south, allowing for sunny skies and a slightly warmer high temperature of about 29°F (-2°C). The warming trend will continue on Friday, and this weekend we should see high temperatures in the upper thirties/low forties, although we may see some rain on Saturday and Sunday associated with a low pressure system sliding up from the lower Midwest.

Extended Forecast

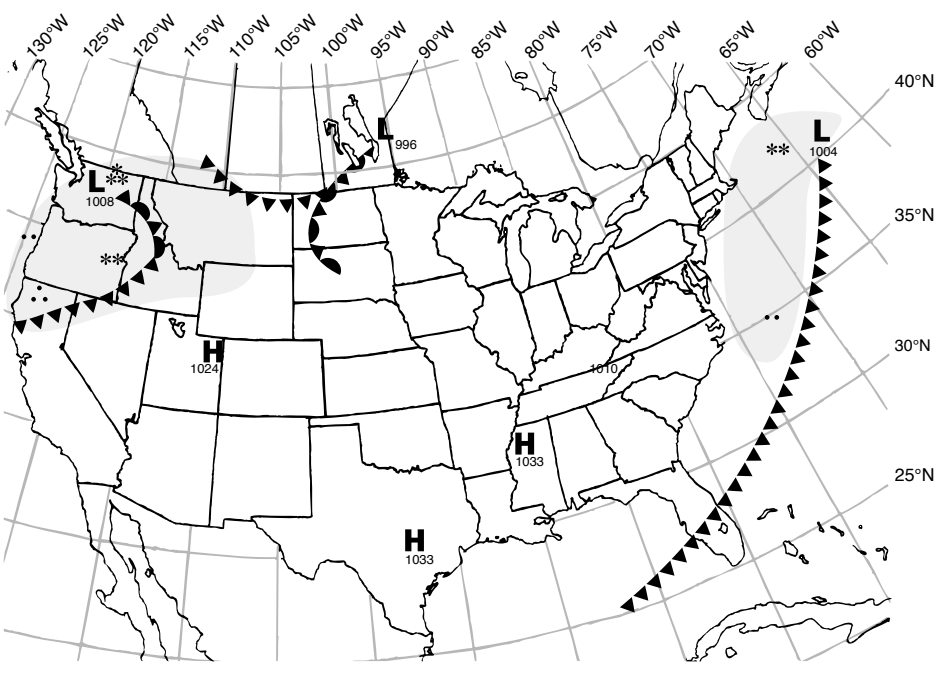
Today: Cloudy in the morning, and then clearing by early afternoon. High 25°F (-4°C) with winds from the west at around 10 mph. Chance of light snow in the morning.

Tonight: Clear, with a low around 13°F (-10°C). West winds at about 10 mph.

Tomorrow: Sunny, with a high near 29°F (-2°C). Southwest wind at 5–10 mph.

Friday: Overcast, with a high in the mid 30s°F (1 to 2°C). Slight chance of snow.

Saturday: Mostly cloudy, with a high in the upper 30s°F (3 to 4°C). Chance of rain.



Situation for Noon Eastern Time, Wednesday, January 29, 2013

Weather Systems	Weather Fronts	Precipitation Symbols			Other Symbols
			Snow	Rain	
H High Pressure	Trough	Showers	* ▽	• ▽	Fog
L Low Pressure	Warm Front	Light	*	•	Thunderstorm
§ Hurricane	Cold Front	Moderate	**	••	Haze
	Stationary Front	Heavy	***	•••	Compiled by MIT Meteorology Staff and *The Tech*

Thai aristocrat sides with the poor

By Thomas Fuller
THE NEW YORK TIMES

BANGKOK — With a buzzer installed in her house to summon her servants and a royal title that helps secure choice tables at Bangkok restaurants, Malinee Chakrabandhu is a bona fide member of the Thai aristocracy.

She is also a self-described "black sheep" of her family, a champion of elections at a time when many in Thailand's upper classes are calling for the overthrow of the government and a suspension of democracy.

"My daughter would like to shut me up," Malinee, 66, said in an interview in her living room, decorated with family photos of Thailand's king and other members of the royal family. "I told her, 'If you don't care about poor people, that's fine. You can remain with the rich.'"

Thailand's protracted political crisis, so severe that some analysts are warning of a civil war, is a power struggle between a political movement that has won every election since 2001 and an opposition that says the governing party represents a "dictatorship of the majority." Both sides say that if elections are held on Feb. 2 as planned, the governing party will almost certainly win again.

Broadly speaking, the crisis has also polarized the country between north and south, between old money and new money and between Bangkok and the provinces. But at the level of individual Thais, the splintering of society is more complicated, and more personal. Political battles are raging within families, between bosses and their employees, within university classrooms and among government agencies.

Even families at the very top of the country's political hierarchy find themselves split. Abhisit Vejjajiva, the leader of the opposition Democrat Party, is allied with the protesters and is boycotting Sunday's elections. His cousin Suranand Vejjajiva is a top adviser to Prime Minister Yingluck Shinawatra, whose party is fighting to make sure the elections are held.

Malinee says that she has lived through plenty of turmoil in Thailand, including a number of military coups, and that the current impasse is "the worst situation I've seen in my life." Political passions have caused a feud within her family — in one telling sign of it, she has blocked her four sisters on social media — and have left her besieged by criticism from opponents of the government.

When an article about Malinee appeared last week in a publication that supports the protesters, readers posted hundreds of biting and derogatory comments. In a country renowned for etiquette and politeness, such invective toward a member of the extended royal family was once unthinkable; now it illustrates how far the civility of public discourse has plunged in Thailand. Protesters of all stripes in recent years have freely employed coarse epithets, often to cheers from the crowd.

Malinee, a direct descendant of Rama IV, a 19th-century king, says the protesters drove her to become more public about her views.

She resents that the protesters have shut down some parts of the city — "we also own the streets," she says — and is angry that the leader of the protests, Suthep Thaugsuban, tells anyone who disagrees with the action to leave the city.

Shares of Yahoo fall after it reports drop in revenue

By Vindu Goel
THE NEW YORK TIMES

SAN FRANCISCO — Yahoo still lags far behind its major Internet competitors, but the company's performance under Marissa Mayer continues to improve.

The Internet portal and web publisher reported fourth-quarter revenue of $1.27 billion Tuesday, down 6 percent from $1.35 billion in the same quarter a year ago. That was roughly in line with Wall Street's expectations.

But the company was more profitable than expected. Net income for the quarter, which ended Dec. 31, was $352 million, or 33 cents a share, up from $274 million, or 23 cents a share. However, the results were lifted by a $49 million gain from the sale of patents. Using a measure of profits that focuses only on operations, Yahoo's profits declined.

"I'm encouraged by Yahoo's performance in Q4 and 2013 overall.

We saw continued stability in the business, and our investments allowed us to bring beautiful products to our users and establish a strong foundation for revenue growth," Mayer, who was appointed chief executive in mid-2012, said in a statement.

Yahoo shares, which had gained more than 4 percent in regular trading Tuesday before the results were released, gave back all of those gains in after-hours trading.

Mayer has unveiled a host of initiatives in recent months, including digital magazines focused on technology and food, and new mobile apps for the weather, news and email.

She has also been on an acquisition spree, including buying the blogging site Tumblr last year for $1.1 billion. Still, she has acknowledged that the company has been slow to make mobile applications a priority.

Yahoo's operating results have long been overshadowed by its share of revenue and income from Alibaba, a fast-growing Chinese Internet company in which Yahoo holds a 24 percent stake. Most investors are valuing Yahoo's stock more on its ownership of Alibaba than on its core business.

Yahoo said revenue from search advertising decreased at a slower rate in the fourth quarter, down 4 percent from the year-ago quarter. Revenue from display ads fell 6 percent. The company sold more ads, but at lower prices.

Yahoo is still the most popular web destination among desktop computer users in the United States, with 195 million unique visitors in December, according to comScore.

But the company has steadily lost ground in advertising against competitors like Google and Facebook. It had 5.8 percent of the U.S. digital ad market in 2013, according to eMarketer.

Putin is given cool reception at EU headquarters

By Andrew Higgins
THE NEW YORK TIMES

BRUSSELS — President Vladimir Putin for years trumpeted Russia's grand ambitions for improved relations with the European Union.

He not only pushed to break down visa barriers across a vast expanse of territory covering more than 6,000 miles, but also urged the creation of what he calls a "harmonious economic community stretching from Lisbon to Vladivostok."

On Tuesday, Putin arrived at the Brussels headquarters of the 28-nation bloc. But he will not even get dinner.

That customary courtesy got yanked from the program — a small sign of how escalating tensions over Ukraine have soured even the basic routines of diplomacy and chilled relations between Moscow and Brussels.

Beyond the protocol slights, there are stark limits to how far Europe is willing or able to go in a high-stakes struggle with Russia over the unrest in Ukraine, where weeks of peaceful protests last week tipped into violence and raised the unnerving prospect of chaotic civil strife on Europe's eastern border.

Russia and Europe have for weeks been trading accusations over Ukraine, with each accusing the other of meddling in the affairs of a sovereign state. Russia last week added to the tit-for-tat recriminations by issuing a lengthy report on what it said were human rights abuses in the EU.

And instead of the ceremonies and wide-ranging meetings, which are usual at the twice-yearly summit meetings between the EU and Russia, Putin faces a truncated session lasting just a day, instead of the normal two.

He arrived early afternoon Tuesday for a brisk photo call and then talks with Herman Van Rompuy, the president of the European Council, the body representing member states, and José Manuel Barroso, the president of the bloc's executive arm, the European Commission.

Officials in Brussels insist that they still want to develop what is officially a "strategic partnership" with Russia, an arrangement built primarily on strong trade ties, but say that they first need to clear a thicket of mistrust, something nobody expects to happen soon.

EU leaders "don't know how to deal with Putin. They can't deal with him: They are 28 and he is one," said Amanda Paul of the European Policy Center, a Brussels-based research body. "They don't have a response to Russia other than words and phrases. Frankly, I doubt Mr. Putin cares at all whether he gets dinner or not. He has his own chef."

Court faults Ireland in abuse case

DUBLIN — The European Court of Human Rights ruled Tuesday that a 48-year-old Irish woman was entitled to compensation for the government's failure to protect her from sexual abuse as a child when she attended a publicly financed Roman Catholic primary school in the 1970s.

The ruling overturned a series of legal decisions by Irish courts over the past decade, which all found that the state could not be held responsible for inhuman and degrading treatment suffered by children in state-funded schools.

The Irish government had argued that, despite its having underwritten the school, its liability did not extend to the school's management or the actions of its personnel. But the court found that there was an "inherent obligation of a government to protect children from ill-treatment, especially in primary education when they are under the exclusive control of school authorities, by adopting special measures and safeguards."

It noted further that Ireland "had to have been aware of the level of sexual crime against minors through its prosecution of such crimes at a significant rate prior to the 1970s."

Legal commentators said the judgment not only opened the door for hundreds of other similar cases in Ireland but also could pave the way for actions in other European states where the education systems rely on similar managerial structures.

—Douglas Dalby, The New York Times

Anti-apartheid figure joins South African opposition

A prominent black South African anti-apartheid activist joined forces with the main opposition party on Tuesday and announced her candidacy in the next presidential election, giving the party, the Democratic Alliance, its first black candidate to challenge the African National Congress, which has dominated political life in South Africa since the end of apartheid 20 years ago.

It is unclear whether the activist, Mamphela Ramphele, a medical doctor, academic, business executive and former World Bank managing director, whose attempts at establishing her own party had foundered, has much of a chance of beating President Jacob Zuma, the ANC's candidate, in the election, expected to be held this spring.

But Ramphele, 66, whose partner, the black activist Steve Biko, was killed in 1977 while in police custody, could inject new life into the Democratic Alliance's efforts to whittle away the large majority that the ANC has had for years. The party has worked hard in recent years to shed its largely white image, choosing up-and-coming black politicians as leaders and appealing to urban black voters fed up with poor government services.

Ramphele would be South Africa's first female president if she wins the election, which will be the first national referendum on the ANC's performance since the death of Nelson Mandela, the father of post-apartheid South Africa and its first black president, on Dec. 5 at the age of 95.

—Rick Gladstone, The New York Times

Top Republicans to present ideas on immigration

WASHINGTON — The House Republican leadership's broad framework for overhauling the nation's immigration laws will call this week for a path to legal status — but not citizenship — for many of the 11 million adult immigrants who are in the country illegally, according to aides who have seen the party's statement of principles. For immigrants brought to the United States illegally as young children, the Republicans would offer a path to citizenship.

But even before the document is unveiled, some of the party's leading strategists and conservative voices are urging that the immigration push be abandoned, or delayed until next year, to avoid an internal party rupture before the midterm elections.

"It's one of the few things that could actually disrupt what looks like a strong Republican year," said William Kristol, editor of the conservative magazine *The Weekly Standard*, calling an immigration push "a recipe for disaster."

The statement of principles criticizes the U.S. higher education system for educating some of the world's best and brightest students only to lose them to their home countries because they cannot obtain green cards; insists that Republicans demand that current immigration laws be enforced before immigrants in the U.S. illegally are granted legal status; and mentions that some kind of triggers must be included in an immigration overhaul to ensure that borders are secured first, said Republican officials who have seen the principles.

—Jonathan Weisman and Ashley Parker, The New York Times

22 deaths in Pennsylvania linked to batch of heroin

Pennsylvania officials warned residents Monday about a dangerous batch of heroin that has caused 22 deaths.

The state's attorney general, Kathleen G. Kane, said that the overdose deaths were most likely caused by a mix of heroin and fentanyl, a strong pain medicine.

"Together, these drugs are creating an extremely dangerous and potentially lethal combination for users," Kane said in a statement.

The deaths occurred in Pittsburgh and several surrounding counties, officials said. The heroin was placed in small bags stamped with the words Theraflu, Bud Ice and Income Tax.

The Allegheny County medical examiner's office in Pittsburgh reported on Friday that three people had died from overdoses of a strong form of heroin in 48 hours. The number of deaths continued to rise over the weekend.

Mayor William Peduto of Pittsburgh warned residents about the deadly heroin on Saturday after four more overdoses and another fatality in the city. "Those who are in possession of this potent formula are in danger of losing their lives," he said. "It will kill you. The danger cannot be overstated."

Peduto told a local television station that the outbreak was not just an urban problem. "Heroin doesn't pick and choose by class or by race," he said. "If somebody has an addictive personality and they get into heroin, then they're stuck."

—Emma G. Fitzsimmons, The New York Times

OPINION

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GUEST COLUMN

Charm School — headed in the wrong direction?

Place more emphasis on social skills, less on job seeking

By Eve Sullivan

People at MIT, like people anywhere, get together for a variety of reasons: to enjoy each other's company, to work, to play, to serve the community. The concern that prompts my writing is that Charm School, first organized more than 20 years ago as an enjoyable, playful, service-oriented IAP activity, has, to its detriment, been transformed into an event focusing more than it needs to on job-seeking skills and other manners in the professional world. These include "dining etiquette and table conversation during business dinners" and "effective email in the business world." Work is only one part of our lives where table manners and email messages are important.

Apparently the Student Activities Office organizers have seen fit to transform this slightly crazy "bazaar" of offerings that (thankfully still) includes sessions on flirting, telling jokes, small talk, and making introductions into one with a primary emphasis on professional development. While personal charm has a role to play in academic and business success, its utility should not be the reason to develop it. How to handle things (the right fork or glass at table) and to choose one's attire (dressing for success) are certainly important, but I believe that it is more important, in developing charm, to honor and enhance personal interactions. Of course it is useful to know basic social skills, but I hope that we learn and practice them because we care about each other, not because we are paid, or expect to be paid.

Business leaders are taught that you cannot manage what you cannot measure, but must we try to manage and measure everything? Not every thing that counts can be counted, and charm certainly counts. We can all, I hope, recall times when someone's generous and kind presence made an unhappy moment bearable. Likewise, we remember happy times made exceptional by the joyful presence of family and friends.

Last year, it was made a requirement that students register for Charm School activities, in order to "track demographics," in the words of the organizers. Do we "track demographics" when we have a party? I don't think so. We invite people, maybe put up balloons, turn on some tunes, "cook up a storm" (or order out!) and hope guests show up, talk together, eat, dance and have fun.

Putting a primary emphasis on recording data de-personalizes our interactions. In the field of medicine, doctors and patients complain that the time spent actually talking and listening has substantially diminished with the introduction of digital records. In the field of education, in many districts, an experienced supervisor or mentor making classroom observations no longer just watches what goes on between teacher and students and makes notes on paper for later review and discussion. Instead, the observer must now use a tablet during the class session in order to answer a set series of quantifiable questions, and check boxes. In both these situations, something ineffable is lost.

The minor but essential interactions that can make our days pleasant, or in their absence make them very unpleasant, are at the core of charm. Do I think of the person coming after me through the door, look back, and hold it for him or her? Do I treat the store clerk like a person or like a warm-ish robot, an extension of the cash register? Do I greet the server at the café or just order my coffee, as if he or she were simply standing in the way of my caffeine infusion? An element of true charm is how well we treat people whom we don't have to treat well. Of course we show respect to a prospective client or employer. Just as important is our respect for people with whom we have less formal interactions or who serve us in some way.

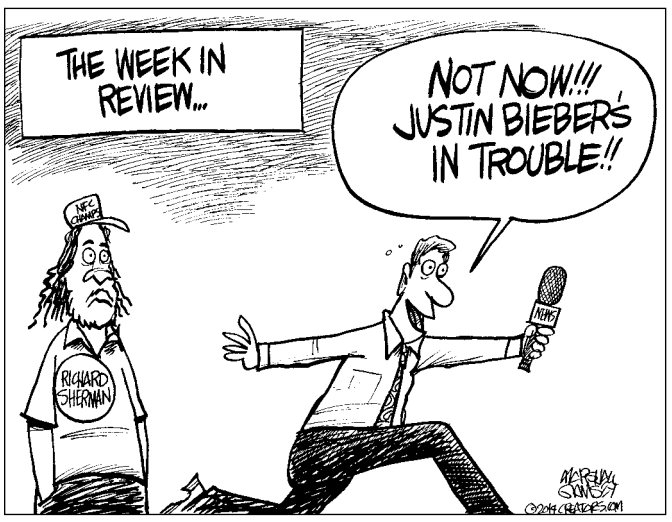
Charm School is not the only effort at MIT to improve the individual student's experience at the Institute and strengthen our community. MIT Together, launched two years ago by Chancellor Grimson, seeks to eliminate the perceived stigma in asking for help. In a December, 2012 MIT News article, Grimson was quoted saying, "I hope that through MIT Together, students will better understand that all of us go through failures, experience self-doubt, have occasional stresses in our personal lives, and that seeking help and advice from others is a natural way of overcoming these challenges."

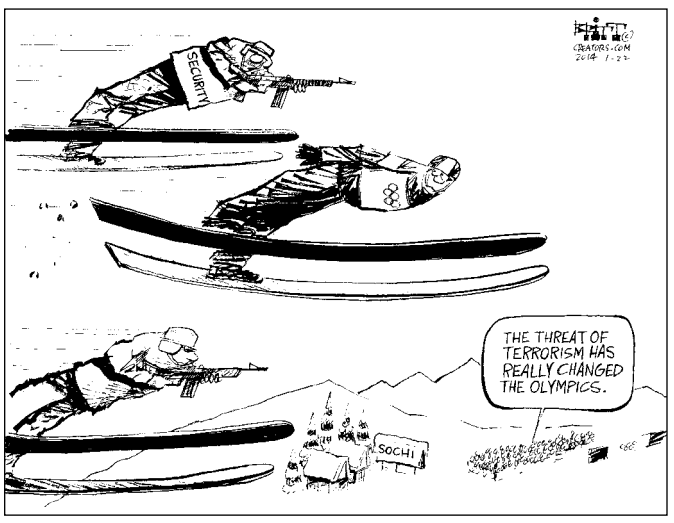
Programs like Charm School and MIT Together should partner to offer events throughout the year. MIT can certainly organize, at various points during the term, rolling rallies combining activities on both charm and compassion. Pop-up help booths on various topics is another possibility. A third might be to make some elements of both initiatives part of Family Weekend. Doing this would increase collegiality, improve cooperation, intensify congeniality, irritate complacency and invigorate creativity. This is not a new suggestion, but perhaps timely, given the following:

In the Jan. 22 issue of *Nature*, Elizabeth Gibney reports that "Extreme" workloads plague scientists at the start of their careers and many struggle to maintain a work-life balance, particularly those academics who are parents. The undergraduate and graduate years are an ideal time to help students develop life skills, including social-emotional awareness, that will serve them well throughout their adult lives. Other community members benefit too, as we all can improve in these areas.

I am grateful to be able to share my perspective on the wonderful MIT tradition that is Charm School. I just don't want to see it taken off track. Manners are important and can be taught, but charm and compassion can only be modeled and practiced. MIT needs more of all three.

Eve Sullivan — Retired Senior Editorial Assistant, Annals of Physics, *and originator of "How To Tell Somebody Something They'd Rather Not Hear" a perennial Charm School favorite, now in the capable hands (and heart) of Constantine Psimopoulos, DAPER Fitness Director.*





CORRECTIONS

Due to an editing error, *The Naturalist's Notebook* column in the Tuesday, Nov. 12, 2013 issue neglected to specify the following in a quote: " … Fiat Spider 850; you don't often see those around anymore."

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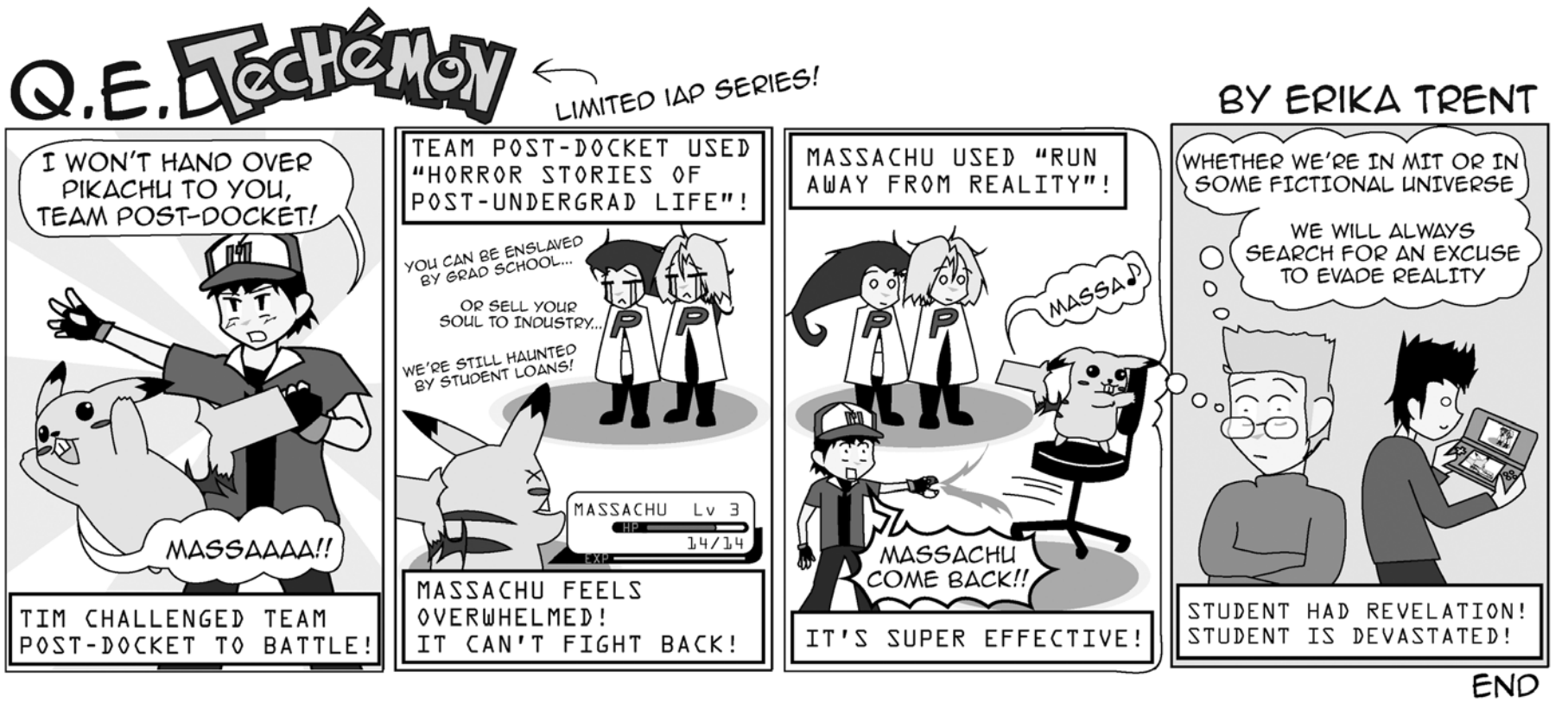
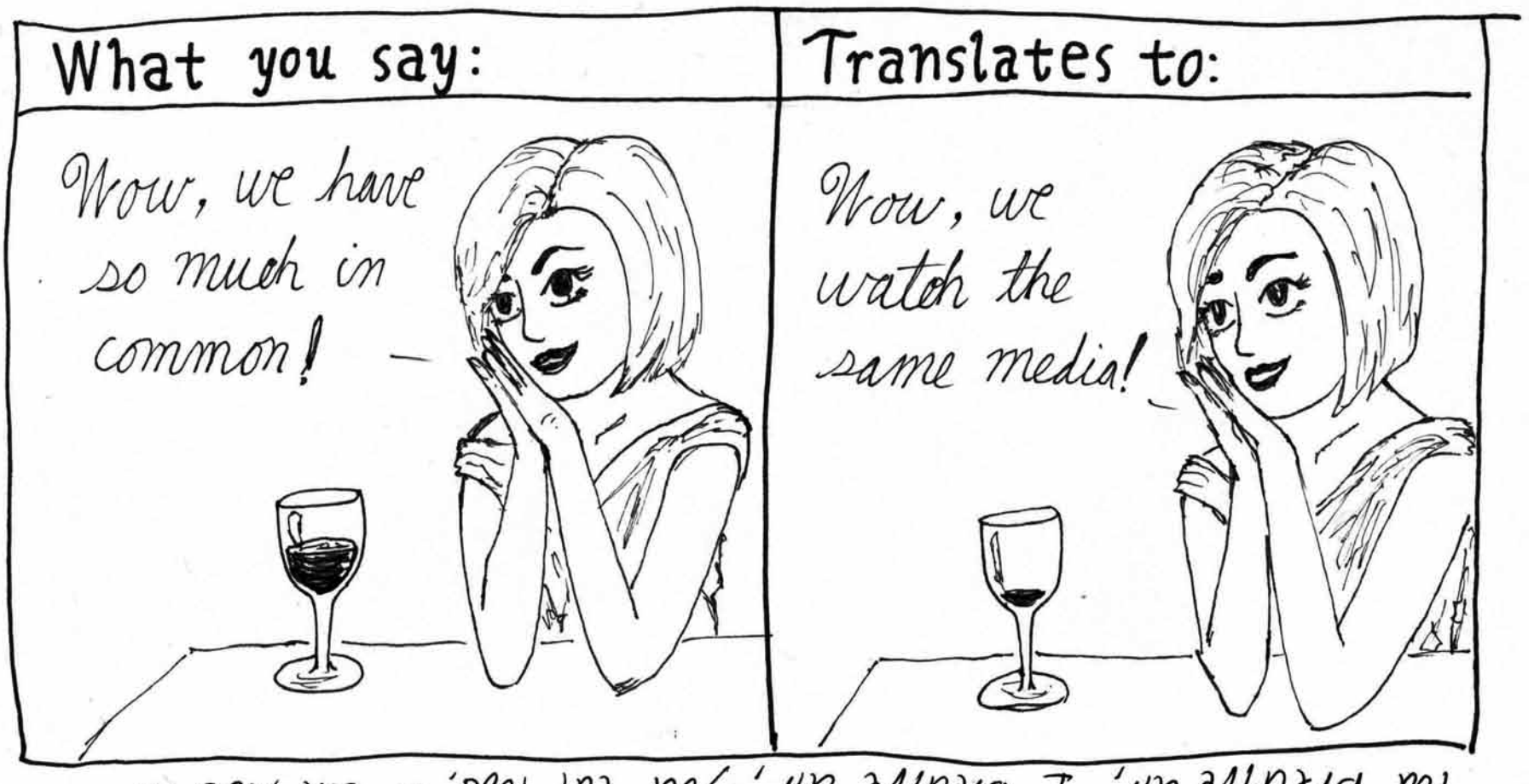


Strangers to Fiction by Deena Wang

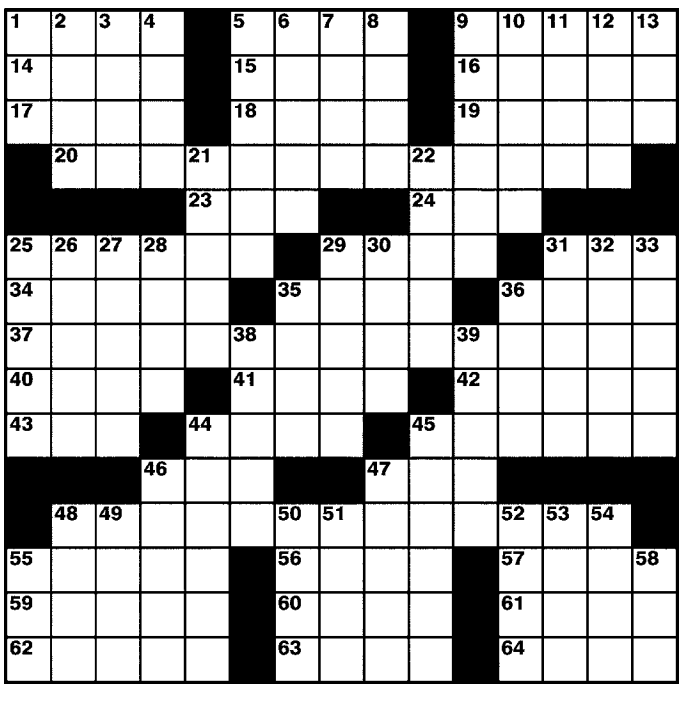


Your Choice by Gail Grabowski

Solution, page 13

ACROSS
1 Outdoor parking areas
5 Honolulu's island
9 Cab-fare calculator
14 Money in Italy
15 Low poker pair
16 Full of energy
17 Eye-color area
18 Soda-can openers
19 Was concerned
20 Eventually
23 Mined rock
24 Lamb's mom
25 Defeated ones
29 "__ the night before . . ."
31 Tummy muscles, for short
34 Continuously bother
35 Wines and dines
36 Busy as __
37 Yard-sale possibilities
40 Mannerly man
41 Calendar row
42 Soda bottle size
43 Weird
44 Glass in eyeglasses
45 Explosions
46 Full collection
47 Life story, for short
48 Question about an urban legend
55 Cockpit boss
56 Assistant
57 Oil cartel
59 In unison
60 Raindrop sound
61 Unwanted garden plant
62 Do the driving
63 Change for a $20 bill
64 "No ifs, __, or buts!"

DOWN
1 Hawaiian necklace
2 Yours and mine
3 Threesome
4 Just average
5 Playful aquatic mammals
6 Mindful (of)
7 Vagabond
8 Cold War adversary: Abbr.
9 Colorful parrots
10 Make happy
11 Bicycle wheel
12 Hardly __ (rarely)
13 Stop-sign color
21 Toward the Arctic
22 Tenant's contract
25 Turn loose
26 Rowed a boat
27 Get to one's feet
28 Dawn direction
29 Carryall bags
30 Earn a living
31 Shares a border with
32 Artist's cap
33 Fortune tellers
35 Small songbird
36 China's continent
38 Have a loan from
39 Dole out
44 Any monogram initial



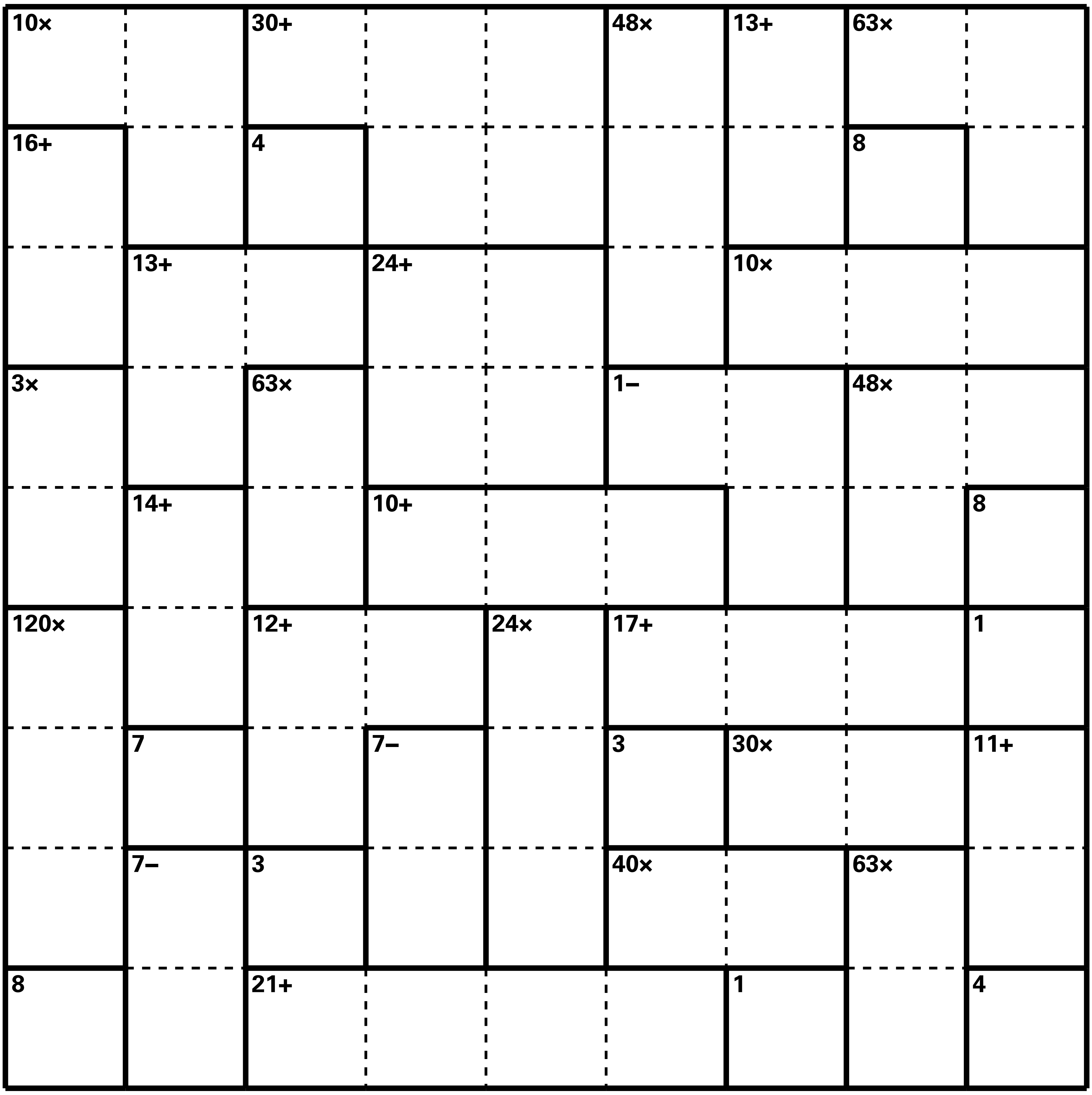
45 Upper-arm muscles
46 Teacake
47 Try to win, at an auction
48 Clenched hand
49 Hand-gel additive
50 Extremely attentive
51 Manicurist's tool
52 Where Des Moines is
53 Unlock
54 Must have
55 Mas' mates
58 S&L investments

FUNFUNFUNF

FUNFUNFUNF

Techdoku II

Solution, page 13



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–9. Follow the mathematical operations for each box.

Sudoku II

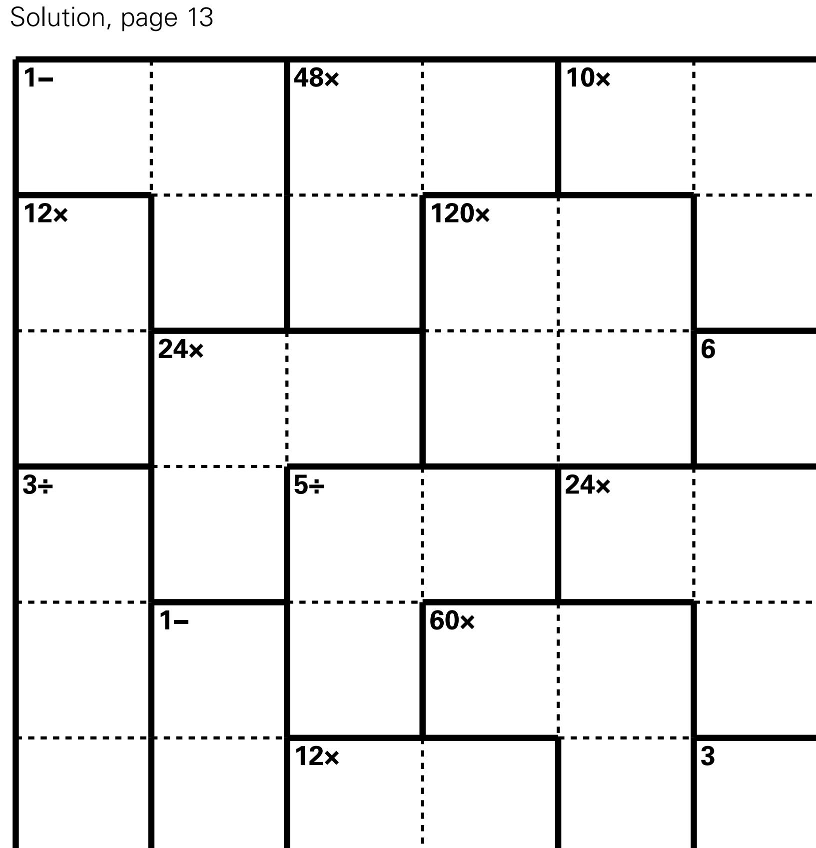
Solution, page 13

7		1						
	2		1					3
		3	2	5	9	1		
5					6	4	8	
			4		3			
	4	2	5					1
		4	6	8	1	3		
8					2		6	
						2		8

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Techdoku III

Solution, page 13



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

ARTS

THEATER REVIEW

The Forest of Eoren, a student-written production

A dryad and a lumberjack walk into Gilbert & Sullivan

MATTHEW PINSON

Dryads Rebecca Graber, Molly Langston, Kelsey Peterson, and Bobbie Hill Meyers protect their homeland from lumberjacks Joe Blair, Aaron Hammond '17, Christine Chilingerian, and Tomohiro Soejima '17 during rehearsals for *The Forest of Eoren*, a production by the MIT Gilbert & Sullivan Players.

By Davie Rolnick
STAFF WRITER

"It's like a Charlie's Angels pose with stuffed animals", says the director. "Remember, you're the spokesdryad."

It's rehearsal for *The Forest of Eoren,* a new operetta that the MIT Gilbert & Sullivan Players (MITG&SP) are premiering this weekend. The show was written and composed by Matthew Bede Pinson G, former president of the Players. Bright with invention, yet clearly inspired by the original Gilbert & Sullivan comic operas, *Eoren* will charm devotees of the British duo, as well as those who simply want beautiful music and a good laugh.

Pinson, who hails from Australia, was born into a family of G&S fans, but had never performed in a show until he arrived at MIT nearly five years ago to start a PhD in physics. He auditioned for *The Mikado* and was instantly hooked. "I had so much fun that when it was over, I needed to keep operetta in my life, and auditions for *The Gondoliers* were over a month away," he said, "I decided to write my own."

Pinson's first operetta, The Marriage of the Miner's Maiden, was sung through by MITG&SP, and delighted the cast so much that he felt encouraged to begin composing another at once. "I wanted something ridiculous, so you don't have to take it too seriously," said Pinson. "Magical creatures are a good way to go." And thus was born The Forest of Eoren, home to a band of dryads who have accidentally fallen in love with lumberjacks. Confusion and hilarity ensue, identities are mistaken, and deception is rife, until all loose ends and couples are joined in a perfect happy ending.

A dedicated cast of students and visiting musicians has worked through IAP to bring the show from score to stage in under a month. "With a new show, you automatically have more creativity involved," said music director Sarah Hager, who works as a choral conductor in Lexington. "There are no recordings that you can listen to."

The biggest shock, coming out of *Eoren*, is that it really isn't a shock at all. The language and music are patently Gilbert & Sullivan, if on a slightly smaller scale. The libretto abounds in witty banter and airy persiflage. Pinson takes full advantage of his arboreal subject matter in such delightful rhymes as "No more let our chorus be sorrowful / Of great joy we will find tomorrow full! / Trees will shine out resplendent with chlorophyll." As with the best of Sullivan, even the sorrowful tunes are lovely, and are destined to stick in your head with the persistence of The Pirates of Penzance.

Kelsey Peterson (women's chorus) has sung with the group for 14 shows, besides appearances as producer and costume director. "It feels like it's this G&S show that I happened to never see before," she said.

G&S aficionados will recognize nods to many of the original operettas, including a "weeping maidens" chorus reminiscent of Patience and an a cappella quartet, complete with "fa-la-la"s, that recalls the madrigal from The Mikado. Despite this stock material, however, Eoren comes across as fresh and new, with an innocence that is hard to come by in any theatrical production. "The show is just entirely adorable — it's distilled joy," said Kathryn Noonan (Queen of the Dryads), "I would definitely put it up there as better than some G&S shows."

Eoren lasts a single act — about an hour, with no intermission. Pinson has effectively miniaturized the common two-act structure by writing what sounds like an Act I Finale to chop the action neatly into two halves. The score includes parts for seven soloists, men's and women's choruses, and accompaniment by piano and clarinet. Refreshingly, the cast is gender-balanced, a contrast from the normal G&S canon, where female characters can be harder to find.

Pinson says that he doesn't want "people to think that there's anything too deep" in *Eoren*. "You could say there's an environmental message here — don't cut down trees — but that's not really it." As with traditional Gilbert & Sullivan, the goal is to be light, charming, and hilarious, and *Eoren* succeeds completely.

The Forest of Eoren

MIT Gilbert & Sullivan Players

8:30 p.m. Jan. 31,
8 p.m. Feb. 1,
2 p.m. Feb. 2

Twenty Chimneys (2nd floor of Student Center)

RESTAURANT REVIEW

Creative, delicious, and meatless

Root is delightful even for non-vegetarians

By Tara Lee

I am not a vegetarian by any means. I always go for a beef patty over a veggie patty, or a chicken Caesar salad over a regular Caesar salad. Back at home, I honestly don't think I've ever stepped foot into a vegetarian restaurant. But, so I've been told, college is "the time to try new things," and so I've started to venture into the world of meatless restaurants.

Root, a small restaurant in Allston, is about 2 miles from campus. It is not too hard to find — cross the river, head west down Commonwealth, and make a slight right turn at Cambridge St. By T, take the B Green Line to the Harvard Ave. stop. Either way, Root is absolutely worth the trip.

TARA LEE

Root, an Allston restaurant, serves "plant-inspired food and juices."

Boasting an earthy atmosphere from floor to ceiling, the restaurant has wooden accents and handwritten menus. Seating is limited, however, with enough tables for approximately 20 diners at a time. Thankfully, the prices are extremely reasonable in the $7–$10 range, and the menu features unique twists on American classics. According to our server, the most popular dish is the Root Burger, which is a black bean and quinoa burger with lettuce, tomato, and onion on a bun. There are also several intriguing beverage options, such as the Root Punch juice, made up of beet, sweet potato, and apple.

First, I tried the BBQ Portobello Sandwich, which had a portobello mushroom covered in BBQ sauce, topped with pickled carrots, red cabbage slaw, and onion rings. The sweetness of the BBQ sauce perfectly contrasted the sourness of the pickled carrots, and the crispiness of the onion rings balanced out the tenderness of the portobello. The bun was toasted well with a fresh, fluffy texture.

I also tried the Sweet Potato Quesadilla, which is listed under "Small Bites," but the four generous cuts could be a full entrée. Now, when I think about quesadillas, I usually picture melted cheese wrapped in a toasted tortilla. This quesadilla was slightly different. Instead of cheese, the dish featured a creamy, sweet and savory thyme sauce. It was smothered over thin, flavorful slices of sweet potato, and the pairing was phenomenal. The kale and sautéed onions were a nice touch, though I would have preferred fewer onions. Overall, however, my $7 were well spent.

Even after trying only two of the many menu items at Root, I was blown away by the creative combinations of flavors. Any restaurant can throw together meat, lettuce, tomato, onions, and a bun, and give its customers a decent burger. A high school cafeteria could sprinkle cheese and chunks of chicken on a toasted tortilla and make a tasty quesadilla. It takes a special mind, however, to combine unexpected flavors into a dish, and make it taste even better than its "normal" counterpart. My advice? Save the $10 you'll spend on a restaurant burger that you could make from a recipe on the Internet. Go to Root and spend that money on the creativity that this restaurant has to offer.

Root

487 Cambridge St., Allston

Monday – Thursday
11 a.m. – 10 p.m.,
Friday
11 a.m. – 11 p.m.,
Saturday – Sunday
9:30 a.m. – 10 p.m.

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From warheads to cheap energy

The father of the US-Soviet atomic recycling program

By William J. Broad
THE NEW YORK TIMES

As the Cold War ended in the late 1980s and early '90s, a new fear arose amid the rejoice and relief: that atomic security might fail in the disintegrating Soviet Union, allowing its huge stockpile of nuclear warheads to fall into unfriendly hands.

The jitters intensified in late 1991 as Moscow announced plans to store thousands of weapons from missiles and bombers in what experts viewed as decrepit bunkers, policed by impoverished guards of dubious reliability.

Many officials and scientists worried. Few knew what to do.

That is when Thomas L. Neff, a physicist at the Massachusetts Institute of Technology, hit on his improbable idea: Why not let Moscow sell the uranium from its retired weapons and dilute it into fuel for electric utilities in the United States, giving Russians desperately needed cash and Americans a cheap source of power?

Last month, Neff's idea came to a happy conclusion as the last shipment of uranium from Russia arrived in the United States. In all, during two decades, the program known as Megatons to Megawatts turned 20,000 Russian warheads into electricity that has illuminated 1 in 10 U.S. light bulbs.

Neff fathered the atomic recycling program in spite (or perhaps because) of his lack of name recognition, his inexperience on the world stage and his modest credentials in arms control. Moreover, he not only came up with the original plan but shepherded it for decades.

"I was naïve," Neff, 70, recalled in a recent interview. "I thought the idea would take care of itself."

In fact, it required sheer doggedness and considerable skill in applying nuclear science to a global deal freighted with technical complexities and political uncertainties. Yet in the end, Neff noted, the mission was accomplished: Uranium once meant to obliterate American cities ended up endowing them with energy.

Nuclear experts hail it as a remarkable if poorly known chapter of atomic history. The two decades of bomb recycling, they say, not only reduced the threat of atomic terrorism and helped stabilize the former Soviet Union but achieved a major feat of nuclear disarmament — a popular goal that is seldom achieved.

In the nuclear age, the rare isotope uranium 235 has played starring roles in war and peace. When highly purified, to a level of 90 percent, it fuels atom bombs; at 5 percent, it powers nuclear reactors for electric utilities.

As the Cold War ended, Neff wondered whether these disparate worlds might be able to do business together. When Washington and Moscow announced major unilateral arms reductions in late 1991, he recalled, "I said: 'Wow. What's going to happen to all these weapons?'"

The beleaguered communist state, he feared, was already cutting back on nuclear upkeep, workers' pay and dozens of measures meant to keep weapons safe. He also suspected that newly impoverished Russian nuclear scientists, once a pampered elite, might seek work elsewhere.

"It all sounded dangerous," he said.

His solution was atomic recycling. The question was how to float the idea.

On Oct. 19, 1991, nuclear experts filed into the Diplomat Room of the State Plaza Hotel in Washington. The agenda of the nongovernmental meeting was demilitarization. A Soviet delegation attended, as did Neff.

Five days later, Neff made his idea public in an Op-ed article in *The New York Times*, "A Grand Uranium Bargain." The illustration showed a kitchen pot and spoon floating eerily above a countertop and — just behind — an open window. Outside was a bomber.

"If we do not obtain the material," he warned, shadowy agents in the former Soviet Union, perhaps uncontrolled by central authority, might seek to "sell weapons-grade materials to the highest bidders."

The idea gained support in both Washington and Moscow. Carrying it out, through a tangle of conflicting state and commercial interests, was another matter. Neff was there to prod it along at almost every turn. In late December 1991, he was among the last Westerners to see the Soviet hammer and sickle flying over the Kremlin.

The first shipment of uranium arrived in 1995; 250 more followed over the next 18 years. Last month, a freighter sailing from St. Petersburg to Baltimore delivered the last shipment. Strapped into transport pallets were giant steel drums, each holding about two bombs' worth of diluted uranium.

Colorful signs on the drums showed fluttering Russian and United States flags, with a message in large type: "20,000 Nuclear Warheads Eliminated."

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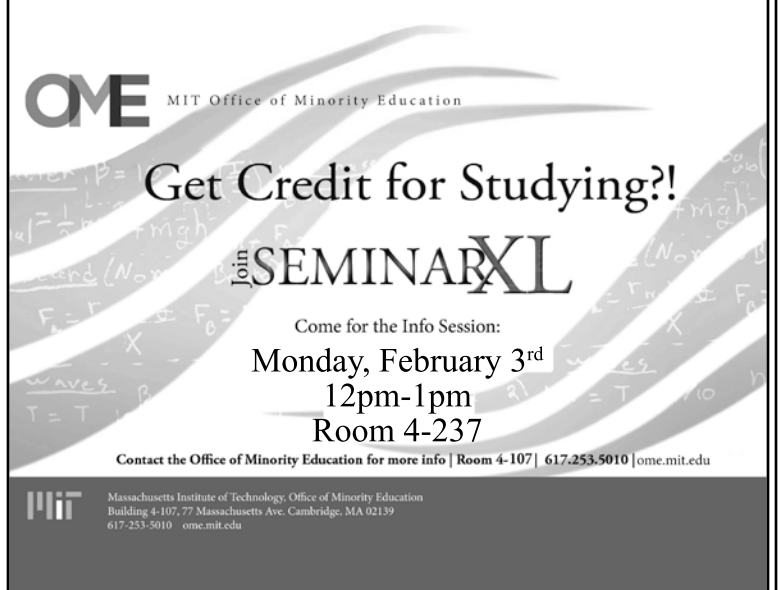

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Experimental 3.091 to revert for Spring

Students express mixed feelings

3.091, from Page 1

Despite the implemented changes, pass rates for this semester did not differ much from previous years. According to Cima, 5 percent of the class failed last semester, compared to 6 percent in 2012 and 4 percent in 2011, so there is no statistical significance. However, "outcomes, as measured by success at solving problems, is substantially improved over the traditional format," said Cima.

The number of week flags was substantially lower this term. Compared to the 29 flags given out in 3.091 in fall 2012, only 2 people were issued flags this year. Cima states that the new format of the class seemed to help the lower half of the class more.

"My impression is that the new format had greater positive impact on the less motivated of the students," Cima said. "That is, those students who would have been in the lower half of the class substantially improved their performance. This is why we had only one tenth the number of fifth week flags as compared with past years."

Conversely, he commented that the more motivated students did not seem to have as much of a chance to shine with this new format.

Sabrine A. Iqbal '17 felt that the assessments shortchanged the material. "Since passing a certain number of assessments was almost the only requirement, it meant most people didn't really care about the material," Iqbal said. "Also, the assessments could be taken multiple times, so many people I know would not even study and would just guess the answers because they could go back and try again."

> **After she passed an assessment, she wouldn't worry about the material anymore.**

Due to concerns that some students were going to try to pass the class by only taking the assessments, Cima implemented mandatory attendance — students had to attend at least 80 percent of lecture, and 80 percent of recitations. Students that did not attend 80 percent of lectures and recitations were at risk of failure. Cima told *The Tech* in September that the policy was put in place in order to preserve the integrity of the experiment as well as to avoid breaking rules which bar GIRs from being offered completely online. "The data supports that attendance does correlate with outcomes," Cima said.

Student Reactions

Subject evaluations did not differ considerably from previous years, with the overall rating of subject going from a 4.6 for Fall 2012 to a 4.2 for Fall 2013.

Some students appreciated the what the experiment did for the class. For Helen L. Zhou '17, the new format made for a lower stress environment. "Multiple attempts at each assessment allowed students to be more relaxed while taking these assessments," Zhou said.

Stephen Guo '17 also appreciated the lessened stress. As he points out, the assessment format meant that there were fewer points of concentrated stress, but "it was challenging because people essentially had to pass on a week by week basis," he said.

> **Motivated students did not seem to have as much of a chance to shine in this new format.**

Others, such as Anna Jungbluth '17, don't regret taking class, but she said the new format is not something that she would recommend. Compared to her other classes, she felt as if she didn't learn much. For her, midterms were the times in which she sat down and fully learned the material, and "the time when I understand the connections between several topics."

The assessments meant that she never really went back over the material, and after she passed an assessment, she wouldn't worry about the material anymore, Jungbluth mentioned.

Jonathan T. Morrell '17 found that the online learning sequences gave him a lot more flexibility in learning, but he thought that the assessments should've been better at evaluating student understanding. "Currently they assess the answer you get from doing a problem, however the answer is obviously secondary to the process you take to get there. If there was a way to better assess that, the class would be much improved," Morrell said.

Nevertheless, according to TA Zhaohong Han, the new format changed students' approach to learning; instead of coming in right before exams, they would "pay more attention to the content in recitation now and ask more questions every time."

TA William F. Dickson '14 felt that students "understood connections between stuff earlier in the semester, much better than students in the past" as a result of the assessment based format.

He acknowledges "the only problem might be that there is no cumulative exam." However, he feels that if given the final exam, the majority of students would not have had to cram.

The course ran into some bugs early in the semester, which were fixed as the semester progressed. One issue that many students ran into, according to Dickson, was that students would have conflict with the original assessment times. However, the staff resolved the issue by allowing extensions in the case of conflicts. Moreover, some students ran into problems with the assessment software itself, but the staff fixed this as the semester progressed.

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Solution to Crossword

from page 5

L	O	T	S		O	A	H	U		M	E	T	E	R
E	U	R	O		T	W	O	S		A	L	I	V	E
I	R	I	S		T	A	B	S		C	A	R	E	D
	S	O	O	N	E	R	O	R	L	A	T	E	R	
				O	R	E			E	W	E			
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E	A	T	A	T		W	O	O	S		A	B	E	E
T	R	A	S	H	O	R	T	R	E	A	S	U	R	E
G	E	N	T		W	E	E	K		L	I	T	E	R
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P	I	L	O	T		A	I	D	E		O	P	E	C
A	S	O	N	E		P	L	O	P		W	E	E	D
S	T	E	E	R		T	E	N	S		A	N	D	S

Solution to Sodoku II

from page 7

7	5	1	8	3	4	9	2	6
4	2	9	1	6	7	8	5	3
6	8	3	2	5	9	1	4	7
5	3	7	9	1	6	4	8	2
1	6	8	4	2	3	5	7	9
9	4	2	5	7	8	6	3	1
2	7	4	6	8	1	3	9	5
8	1	5	3	9	2	7	6	4
3	9	6	7	4	5	2	1	8

Solution to Techdoku II

from page 7

2	5	8	6	9	1	4	3	7
7	1	4	2	5	6	9	8	3
9	3	6	4	7	8	2	1	5
1	4	7	5	8	9	3	2	6
3	6	9	7	1	2	5	4	8
5	8	2	9	3	4	7	6	1
4	7	1	8	2	3	6	5	9
6	9	3	1	4	5	8	7	2
8	2	5	3	6	7	1	9	4

Solution to Techdoku III

from page 7

5	3	4	6	2	1
3	1	2	4	6	5
4	2	3	5	1	6
6	4	5	1	3	2
2	6	1	3	5	4
1	5	6	2	4	3

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GRANTS PROGRAM

EVENTS JAN. 29 – FEB. 4

WEDNESDAY

(12:00 p.m. – 1:00 p.m.) How do the Libraries select books for the shelves and your computer access? — 14N-132

(6:00 p.m. – 8:00 p.m.) Institute Diversity Summit presents *Brother Outsider: The Story of Bayard Rustin* — 32-123

THURSDAY

(5:00 p.m. – 6:00 p.m.) History of Heavy Metal: Part III — 14N-217

FRIDAY

(11:00 a.m. – 12:00 p.m.) How to Speak lecture by Professor Patrick Henry Winston — 10-250

(2:00 p.m. – 4:00 p.m.) MIT Can Talk Speaking Competition — 32-141

SATURDAY

(5:00 p.m. – 8:00 p.m.) Harry Potter Trivia Challenge — 1-246

(8:00 p.m. – 9:30 p.m.) A Concert of Music by Elena Ruehr — 14W-111

MONDAY

(7:00 p.m. – 8:30 p.m.) Women and Gender Studies presents *How to Lose Your Virginity* — 6-120

Send your campus events to *events@tech.mit.edu*.

Alberty remembered fondly for contributions to science

Alberty shaped field of theoretical thermodynamics

Alberty, from Page 1

book to the last detail, [and] rewrote or edited large parts of it, with a clear sense of what he thought should be reorganized to make the text up-to-date. It was an amazing learning experience and a humbling one to watch the two Bobs — Bob Alberty and Bob Silbey — rework the text, especially with Bob Alberty well into his eighties at the time."

"When I was hired at MIT in 1990, it was in anticipation of Bob's retirement," Bawendi adds. "But it never felt that Bob ever actually 'retired,' as he was still heavily involved for so many years writing theoretical works, textbooks, and active in leadership positions of chemical and scientific organizations. I was lucky to have had the chance to work with Bob."

Alberty's work on Physical Chemistry led to invitations to participate in and chair national research committees concerned with laboratory safety standards and chemical disposal. A report he authored for the National Research Council in 1981, "Prudent Practices in the Chemical Laboratory," sold more copies than any of that organization's previous publications. Alberty also chaired the committee that wrote a second report, in 1983, "Prudent Practices for the Disposal of Chemicals in the Laboratory."

Alberty was no stranger to senior administrative roles at universities: In 1967, while dean of the Graduate School at the University of Wisconsin at Madison, he was invited to become dean of the School of Science at MIT, as well as a faculty member in the Department of Chemistry. His notable achievements as MIT's dean of science included the development of a joint MIT-Harvard University MD-PhD program and the establishment of the Cancer Research Center, now the Koch Institute for Integrative Cancer Research. He was also the first co-chairman of MIT's exchange program with Wellesley College and chaired the Institute Committee on Environmental Health and Safety.

As dean of science, Alberty "was always available to his colleagues, and always optimistic about finding funding for many endeavors to benefit chemistry and the Institute as a whole," says Bob Field, the Robert T. Haslam and Bradley Dewey Professor of Chemistry. "He liked nothing better than to convey good news about tenure."

"I overlapped with the late stage of Bob Alberty's career, after he returned to being 'just' a professor following a stint as dean of science," says Keith Nelson, a professor of chemistry. "Long past official retirement and into emeritus status, Bob had fewer official responsibilities but just as much scientific curiosity, energy, and enthusiasm as ever. So he took advantage of the opportunity to work with few distractions to consolidate much of the last phase of his theoretical research and to write a unique textbook, Thermodynamics of Biochemical Reactions, published in 2005."

This topic is not covered in standard courses, Nelson adds, "largely because the theoretical framework and its applications were developed much more recently than the rest of thermodynamics, and significantly by Bob Alberty. The very next year, Bob published a supplementary text on applications of Mathematica software to problems in biochemical thermodynamics. ... [He] was not content to inscribe his scientific achievements in textbook form, but also succeeded in bringing his discipline to life for a new generation of students and scientists."

Alberty spent 30 years as an advisor to the Camille and Henry Dreyfus Foundation and was instrumental in developing many of its programs — including the Henry Dreyfus Teacher-Scholar Awards Program, which supports young chemistry professors who have demonstrated interest and ability in being outstanding teachers as they are considered for tenure.

> **Alberty's notable achievements as MIT's dean of science included the development of a joint MIT-Harvard MD-PhD program and the establishment of the Cancer Research Center.**

Born in Winfield, Kan., Alberty carried out his undergraduate studies at the University of Nebraska, receiving his BS in 1943, followed by an MS from the same university. In 1947, he received his PhD in chemistry from Wisconsin and immediately became an instructor at that institution. He moved up the ranks at Wisconsin, becoming a full professor in 1956. In 1962, he was appointed associate dean of letters and science before being appointed as the dean of the Graduate School in 1963.

Alberty received professional awards and accolades including membership in the National Academy of Sciences, the American Academy of Arts and Sciences, the Institute of Medicine, and the American Chemical Society.

Alberty was predeceased by his wife of 66 years, Lillian; the couple met in high school, when he was president of the chemistry club and she was the club's secretary. They both attended Wisconsin and married the day after their graduation.

Alberty is survived by his three children, Nancy Lou Zant, of Fairfield, Mont.; Steven C. Alberty, of Eugene, Ore.; and Catherine Alberty Baxter, of Roseville, Minn.; by nine grandchildren; and by six great-grandchildren.

Services will take place at 11 a.m. on Saturday, Jan. 25, at University Lutheran Church, 66 Winthrop St., Cambridge.

This obituary was originally published online by the MIT News Office on Jan. 23, 2014: http://web.mit.edu/newsoffice.

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Epsilon Theta Spring 2014 Rush Schedule

Meet us at the chapel turnaround (across Maseeh) at the listed time. Look for the yellow sign!
Vegan options available at every meal!

Friday 1/31
5:15 PM **Pasta**! Put all the sauces on all the things!
7:00 PM **Fermi Questions**. How many french fries have ever been eaten?
9:00 PM **League of Legends**. Come play the most popular game in the world, League of Legends! No experience required.

Saturday 2/1
9:00 PM **Rock Band**. Get Ready 2 Rokk.

Sunday 2/2
12:15 PM **Lunch**! Join us for a tasty home-cooked meal by our cook Karen.
1:30 PM **ART.** We will have people teaching/doing drawing, origami/kirigami, clay, chainmail, painting, crochet, and post-it art murals. No experience required! Let's make art together.
3:30 PM **More ART**. It's not too late to join us in doing some art.
7:00 PM **Game of Thrones Board Game and Episode Marathon Night.** Set aside a night. Get ready to lose some friends. Winter is coming.

Friday 2/7
5:15 PM **Tacos**! Stuff tacos to your heart's desire.
7:00 PM **Food Tongue 101**. Pear wonton peach sauce food tongue?
9:00 PM **LAN Party**. Warcraft 3, Starcraft 2. Natural Selection 2. Age of Empires 2, League of Legends. You name it!

Saturday 2/8
12:15 PM **Lunch**! Join us for a tasty home-cooked meal by our cook Karen.
1:30 PM **Anime Marathon.** Join us for an Anime Marathon of Eden of the East!
5:15 PM **Dinner**! More food by Karen. Yum!
7:00 PM **Programming Competition**. Write an AI to compete in a short game of our design.
9:00 PM **Laser Maze.** Homemade laser security system, Nerf gun guards, puzzles, what else could budding spies want?

Sunday 2/9
12:15 PM **Lunch.** Karen is the best. She makes us tasty food. Join us in eating said food.
1:30 PM **Python Bee**. "Now was that three spaces or four? Darn. Let's start over."
3:30 PM **Manhunt**. How quickly the tables turn and the prey becomes the predator. Rock paper scissors tag---tag the last of your prey at your own risk! Join us on campus at Lobby 7!
5:15 PM **Make Your Own Pizza!** Try your hand at crafting a delicious pizza.
7:00 PM **Scary Games By Committee**. Play scary games! Watch other people play scary games! AAAAAAAAAAAA!
9:00 PM **Charades Variants.** Impossible charades, telephone charades, contact charades, blindfolded charades, ALL OF THE ABOVE AT ONCE.

Solution to Sodoku I

from page 6

7	2	3	4	9	8	1	6	5
8	4	1	3	5	6	9	2	7
6	9	5	7	1	2	8	3	4
1	3	6	2	7	4	5	8	9
2	5	7	6	8	9	4	1	3
9	8	4	5	3	1	2	7	6
4	6	9	8	2	7	3	5	1
3	1	8	9	6	5	7	4	2
5	7	2	1	4	3	6	9	8

Solution to Techdoku I

from page 6

2	1	4	3	5	6
6	5	2	1	3	4
5	4	1	6	2	3
3	2	5	4	6	1
1	6	3	2	4	5
4	3	6	5	1	2

Breaking silence

An account of sexual assault

By Anonymous

Author's foreword

I am writing this not because I know exactly what words are the most right to say, but because I know it is important: I know it is important, and I know that I am not alone.

I graduated from MIT nearly two years ago, with a relatively normal, MIT life. I lived in a dorm, double majored, was involved in various student groups, and spent most of my spare time doing research. In the spring of my junior year, I was raped by an older colleague within my research group, losing my virginity.

I viewed the man as a mentor and close friend, and I felt a great deal of respect and trust for him, as a mentor. A dinner that I thought was going to be about discussing science turned into something extremely wrong.

For over a year–a year of confusion and deep depression — I remained primarily silent. My grades and focus suffered tremendously, but I was too embarrassed to tell any of my professors or teachers, or even most of my friends and family, what I was going through.

I viewed the man as a mentor and close friend, and I felt a great deal of respect and trust for him, as a mentor. A dinner that I thought was going to be about discussing science turned into something extremely wrong.

Only in the weeks leading to my graduation, I reported the case, formally, to the police, with the support of MIT's extremely supportive Violence Prevention and Response program (VPN). I was afraid of reporting, for not being believed, for making the man who had done it to me angry, for potentially ruining a former friend's life (when all I wanted to do was protect other students), and even for the ungrounded fear of losing all respect from my research advisor.

After three months of repeatedly explaining my story first to the supportive MIT police, then to the supportive local police, and finally to an unsupportive Assistant District Attorney, I was eventually told by the ADA that I had merely had "traumatic sex" and that the man was "sick" and "an *sshole." But, "it was not illegal for [him] to want sex," she said. She told me that there was not a clear enough of a struggle, and that "consent is not like signing a contract" (that my standards for consent were too high).

Although I now know with 100 percent certainty that I did the right thing for myself and my situation — in reporting the rape to authorities — I was even more deeply traumatized by the experience, at the time. I have since decided that silence would have been the most painful type of humiliation to bear, especially over time. But it was the concern for the well-being of other young, trusting and equally vulnerable students that initially drove me into action: action to report and now action to speak publicly.

After years of therapy, the love of my family and close friends, travel, and self-care, I am beginning to feel whole again. I am sharing this story here, because I want to give hope to any individual — male or female — who may currently feel voiceless, confused, worthless or hopeless, due to sexual violence. You are not alone and your amount of worth is infinite. Be gentle and patient with yourself.

Here is my story.

It is as raw and unedited as when I first put words to my experience — in the weeks before I reported my rape to the police — over two years ago:

Junior spring. Sex without adequate warning. Sex without my consent. Sex in a clearly imbalanced power scenario. A man 10 years my senior. Deeply disturbing and nauseating. Coworker. R---?

It is so much easier to deny than to say.

Rape.

As a "strong" woman, I initially wanted to forget it had ever happened: I believed that I was an extraordinarily naïve person who had fell into a foxhole. At the time, I did not consider how it was fundamentally flawed to view myself as prey, and him, a socially acceptable predator. I wanted to believe that night was a glitch that may or may not have happened: it was left to me to decide.

Regardless of whether his primary ammunition was his net of words or the dead weight of his body on top of me, I initially accepted that this was the way things were, and I noted my inadequacy in navigating the system–in all of my shock and numbness. It was too bizarre to possibly ever understand.

The most important reality, I thought, was that nothing had happened, as far as the rest of the world knew. I was still alive and that's all that really mattered. I could go on with my life, however I would choose. I believed that the only seed of shame produced that night was firmly planted in me — not him — and if I could hide it well enough, no one would need to see its spec of ugliness.

Yet, I had asked him to stop multiple times and tried to push him off of me. I knew this. He ignored me, but who was to blame? I had not spit in his face or tried to claw his eyes out. Instead I lay on his bed naked — with my clothes peeled off — trying to calmly explain that I would not, I could not, have sex with him. The rapid, forceful, and completely foreign advances were too much already. My "stop" was immediately silenced with "your body wants me so bad." When he didn't listen, my brain failed to believe it was actually happening and shut down. I felt deep guilt and shame that my subsequent silence was interpreted as a waving white flag: mistaken for consent.

The abuse of his power was evident; he was ten years my senior and in a higher-ranked position at my workplace.

I told him "stop" and I truthfully told him that I was a virgin. Yet, when he was finished, hours later, he pushed me aside saying, "You were never a virgin anyways" (what did he even mean? I still do not know). He damned my desire for rationality to a hell of pure absurdity; he suddenly became not a person but a wall.

I could not process why suddenly, after years of working alongside him, why my words and opinions were suddenly inadequate. Instead, I wondered when, exactly, did I stop existing as a student? Had I always been this silent to him? I did not fully consider why he wanted to watch me wash myself. Comparing this familiar action to the previous night's unfamiliar events, it seemed like an act of charity and not a means of self-preserving insurance.

"I can't help but feel that I took advantage of you and it's not really fair," he later wrote. That was as close to an apology as I would ever get, and those words seemed to come from an entirely different spring: one which was vaguely familiar and contained traces of logic. But regardless, what exactly was not fair he never explicitly stated or clarified. I would never understand.

The first person I described my experience to (the day I had been dropped off at my dorm room) was another student, who I viewed as a more-experienced friend whose judgment I then respected more than my own. But when I began to describe what had happened, she interrupted me with kind laughter and gently touched my shoulder saying, "no one can be that stupid" (in response to my description of how I was alone with him, to begin with). "The next time you're in a situation and you don't know what it means, you call me," she said. I reminded her that I had lost my cell phone, weeks before.

Extending her advice, she told me "I know it feels weird now that he was much older than you, that he wasn't your boyfriend, and that you were uncomfortable with wanting it at the moment," she paused "But at least did you get any sexual pleasure from it?"

"No," I had not.

That didn't seem to matter.

She said she had to work on some homework and hugged me goodbye. I remembered I had to do the same.

Even then — even in a stage that I now call shock and denial — I realized that my sexual experience was physically painful, his words were taunting and hurtful, his neglect for my opinion was belittling, and his seemingly older and wiser advice that "I could tell no one" was humiliating. The abuse of his power was evident; he was ten years my senior and in a higher-ranked position at my workplace. As an opening to the night, he bragged that only weeks before had he "helped secure" a multi-million dollar grant, which he described over an uncomfortably overpriced dinner that he insisted on buying me. It was because of his work, he said, that people could do much needed-research, probably in things like cancer. Here, he was the true ethical hero, he said: focusing on the big picture and what really mattered.

The morning after, he reminded me that other girls always enjoyed "it" more than I had. He suggested I should get to know my body more, and then I wouldn't feel so uneasy next time. I needed to learn how to "let go" of myself, he said, if I wanted to enjoy it. I wanted to believe he was wrong — part of me always wanted to believe that I wasn't the reason for my own confusion and lack of control—but as he pointed out, I was now uncertain of everything, and should be.

His words: "F**king tease," "you want it," "stop fighting it," "let it feel good," "relax," "yes," "this is just like porn," "you want this," and "I'm sorry I never told you how cute you are" cycled through my head and taunted me relentlessly. I wanted to believe that his words, and my inability to process them–rather than the act of rape itself — were the real enemy. It was easier that way.

But my body and my subconscious forced me to believe otherwise.

In the days following, I could not eat. I could not sleep. I could not cry. I could not move. I failed my only final that marking period, and I barely finished my other classes' final projects. I upset my dorm's housemasters by not moving out of my room on time, and I missed my first flight home. Most everyone I knew had already moved out and left for the summer. In the following days, I would miss three more rescheduled flights. At least, I could not be bothered to care.

Finally, a friend unaware of what had happened and who lived in the area, helped me box all of my belongings and move them into the basement. She wanted to say goodbye before the summer began, and she noticed I needed help when she unexpectedly stopped by. For the first time in days, I ate. I had a reason to get out of bed and reclaim the movement of my limbs. Like most of my friends, I told her nothing. She will unlikely ever know how much she saved me that day.

Nearly a year later, my nightmares have not ceased, but my story is no longer one that I carry alone. I have finally accepted that I cannot forget, and I should not forget. But perhaps what is most interesting, is only now have I begun to feel true fear. I still wake up each morning, unable to discern that the hand resting on my shoulder is my own, and not another's. I continue to half-sleep each night, fully-clothed, with all of my lights on. I spend the first moments of each morning in unquenchable nausea and fear.

But, what I worry of more, is what will happen if I remain silent. I am beginning to question what I can do, or what I should do, with what I can remember.

But, what I worry of more, is what will happen if I remain silent. I am beginning to question what I can do, or what I should do, with what I can remember. I have accepted that I will never be able to tell if I am reacting too little or not enough. I realize that all that I can be from now on is what remnants I have chosen to keep of myself: what I remember, what I feel, and what I think is worth speaking for.

Before, as a consequence of post-traumatic stress, I dreamed every night that a different man raped me. In excruciating detail, I dreamed myself being raped by my closest friends, men I have loved and trusted, my family, and men I have purely imagined. Faithfully, every night, men would sink into my dreams and find me. Each night was a new and complex scenario; each rape I was unprepared for and took me by surprise. I woke up each morning, shaking, crying, and needing to throw-up everything I had eaten the previous evening.

Even in the daylight, and even now, I am constantly startled. I constantly forget things, and I constantly drop things I am holding, without even noticing. I have let many of my peer-aged friendships disintegrate, which I am now trying to restore and re-patch. I no longer get joy in eating at elaborate dinner-dates in their company (I realize, the more I eat, the more I will vomit the next morning), and I hate men's stares and walking alone to my apartment.

I now realize this makes things difficult, but not impossible. I became convinced that if a man ever forced himself on me again, I would rather die fighting than live in an eternal night of loneliness, confusion, nightmares and vomit. More so, however, I became more and more aware that no other woman, man, or child should ever feel so hopelessly trapped and alone, in the same way that I have. I now worry more for the health of other people; people perhaps like me.

Most of all, I have come to realize that when one cannot distinguish a deeply disturbing emotional and physical hell from what is the socially accepted "norm," there must be something about the norm, in reality, which is seriously flawed.

Now, my dreams have not ceased, but the content has dramatically changed. I dream of telling my boss, the police, and my entire family of what happened. In my nightmares, no one believes me, and I am thrown out of the room. I never know precisely who to tell, or how. My words are never adequate or sufficient. I am tormented by this worry in both my waking and sleeping hours alike.

Trusted friends assure me this is a largely irrational fear, and I wish I could believe them. But I think this — this question of whether her point holds any real validity, or even if it should — means that I am making progress.

This account is anonymous to protect the identity of the author.


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File   Edit   Options   Buffers   Tools   Im-Python   Python   Help

from new_skills import *

def learnMarketableJobSkills():
    return linux, OSX, javascript, applescript, perl, python, PHP

if self.interest == True:
    print "E-mail join@tech.mit.edu"

----:----F1 joinTechno.py      (Python)--L1--Top----------
```

SPORTS

Rifle team comes out on top in their weekend matches

Team competes in Beanpot and NRA sectionals

By Phil Hess
DAPER STAFF

Returning to action for the first time in 2014, the MIT rifle team came up with a number of career highs during the annual Beanpot competition this weekend, enough to carry the Engineers to the team title. MIT posted the top scores in both the small bore and air rifle disciplines on Saturday, putting up scores of 2,164 and 2,245 to edge out second-place Coast Guard. On Sunday MIT had the top air rifle score as well with a 2,246. Coast Guard posted the top smallbore score on the final day, a 2,167. Teams from Canisius, Penn State, Wentworth Institute of Technology and Penn State ROTC also took part in the competition.

Posting rounds of 97 and 96 in the kneeling position of the smallbore competition on Saturday, Kaiying Liao '14 went on to post a career-high 567 to lead MIT and all other shooters in the match. Liao just edged out Alexis Chavarria-Aguila from Coast Guard by six points for the individual title. Sarah N. Wright '16 was third overall with a 555, including a round of 99 in the prone position. Kelly J. Mathesius '17 turned in a season-best of 524 and Abra H. Shen '16 fired a 519 for the Engineers, who edged Coast Guard by 20 points for the top smallbore score.

On Sunday it was Wright who claimed top honors, posting a pair of 98s in the prone position on her way to a final total of 569. Chavarria-Aguila was the runner-up again, posting one score of 99 in the prone position to help her to a 565. Liao finished third overall for the Engineers with a 555, with Shen and Mathesius posting scores of 517 and 515 to round out the MIT scoring.

Wright also had a round of 99 in the air rifle competition on Saturday as she tallied a career best total of 572 to tie with Coast Guard's Nicholas Paisker for top individual honors. Chavarria-Aguila took third overall for the Bears with a 564. Just one point behind was MIT's Liao and Jia Yi Goh '17 with their 563's, while Shen turned in a career-high with her effort of 547. In the team scoring it was another close one, with the Engineers again edging out the Bears, 2,245 to 2,237.

Goh claimed the top spot on Sunday, seeing all of her rounds score at least 93 points on her way to a 574. Wright was second, duplicating her Saturday effort with another 572. Chavarria-Aguila claimed third overall for Coast Guard with a 569. Liao fired a 551, with Shen upping her career best again with a 549.

Mathesius also recorded a season best in air rifle with her total of 524 on Saturday and added another season best in air rifle on Sunday with a 534. Kevin Y. Ng '17 also shot for the Engineers, posting a season best with a 480 in smallbore on Saturday. Christopher J. Rogers '16 also competed for MIT, posting a season-high of 499 in smallbore on Saturday. Vanya L. Britto '14 also set a new career-high for the Engineers, firing off a 500 in air rifle on Sunday.

The rifle team also won NRA sectionals.

ELIZABETH PHILLIPS

The MIT Rifle Team competed in the Beanpot Competition this past weekend. The Engineers set numerous career highs and beat five other teams to take the title.

MIT swim team receives awards

Team wins in weekend meets

By Charlotte Brackett
DAPER STAFF

Michael J. Liao '14 was named the NEWMAC Swimmer of the Week and was part of the 200-yard medley relay, along with Bradley A. Mattix '16 and Sean R. Corcoran '16, and Austin D. Fathman '15, that received Relay of the Week accolades on Monday. This is the fourth time this season, dating back to Nov. 25, that the Engineers have earned both Swimmer and Relay of the Week during the same week.

MIT had a busy week of competition; on Friday evening, the Cardinal and Gray traveled to Williamstown, Mass. to face Williams College, falling to the Ephs in a close, aggressive meet by a score of 159-137. On Saturday, MIT hosted Amherst College, ending the day with a 185-115 victory. Against Amherst, the Engineers started the day off right by winning the 200-yard medley relay with a time of 1:32.73, touching almost three seconds ahead of the Lord Jeffs' A relay.

Over the weekend, Liao racked up five victories in all. Against Williams, he won both the 100-yard breaststroke and the 200-yard breaststroke with times of 57.39 and 2:05.53 respectively. At home on Saturday, he added three more wins to that list. He was part of the 200 medley relay, and easily won the 100 breast with a 55.31 and the 200 breast in 2:00.84, breaking the Zesiger Center pool record by a few tenths of a second in the latter. His 200 breast is currently second in Division III and his 100 breast is the third fastest in the country.

Next up for the Engineers will be the Wheaton Invitational, which will take place from Friday through Saturday, Feb. 7-8. The next time MIT will race after that will be at the NEWMAC Championships, set to take place from Thursday, Feb. 20 through Sunday, Feb. 23 at WPI.

UPCOMING HOME EVENTS

Wednesday, January 29

Squash vs. Northeastern University *7 p.m., Zesiger Center Squash Courts*

Men's Basketball vs. Wheaton College 7 p.m., *Rockwell Cage*

Saturday, February 1

Men's Volleyball vs. Harvard University *6 p.m., Rockwell Cage*

Monday, February 3

Squash vs. Boston University 8 p.m., *Zesiger Center Squash Courts*

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We print MIT's only newspaper twice per week, and we have fun doing it.

Want to be a part of this?

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