



License Commission Suspends Alpha Tau Omega for 20 Days

Punishment for Underage Drinking, Spring Weekend Disturbance

By Jennifer Krishnan
NEWS EDITOR

Alpha Tau Omega will be suspended for 20 days by the Cambridge License Commission (CLC) as punishment for underage drinking and causing a public disturbance during Spring Weekend. The suspension period will not coincide with rush.

The CLC, which made its decision at last night's hearing, was investigating a complaint of racial remarks allegedly shouted from ATO's roof, an ensuing altercation with The Roots band, and the supposed presence of alcohol on the roofdeck.

Photographs provided voluntarily by a member of ATO led commissioners to believe that many

underage people on ATO's roofdeck that afternoon were drinking.

Jeffrey J. Billing, ATO summer house manager, had originally testified that there was a case of beer on the roofdeck and that a only a few people were drinking.

CLC Chairman Benjamin C. Barnes said he could see "hard liquor ... and some 40 oz. bottles of alcoholic beverages" in the photographs.

Additionally, CLC Executive Officer Richard V. Scali hinted that Interfraternity Council President Rory P. Pheiffer '02 withheld the "most disturbing" photographs from the Commission. The CLC originally received only 12 of 16 photographs mentioned in the police report.

'Positive actions' lighten sentence

Billing, Pheiffer, and Associate Dean for Students Robert M. Randolph argued that ATO took steps to deal with the racial implications incident on its own, adding that punitive measures would detract from the utility of the constructive measures already in place.

"The positive actions ATO took [are] the only reason I'm not recommending 30 days," Barnes said.

Cambridge Police Department Captain Henry W. Breen said that the racial slurs that were allegedly shouted from ATO's roofdeck were wrong, but that, as a first offense, they merited "positive discipline" in

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Fireworks explode over the Charles River as part of Boston's Independence Day celebrations. More photos, page 15.

Wellesley Sophomore, Boarder, Dies at ATO

By Jennifer Krishnan
NEWS EDITOR

A Wellesley sophomore was found dead at Alpha Tau Omega, her summer residence, on July 2. Cambridge police said the death appeared to be a suicide.

The student, 18-year-old Molly Thompson, was found by a roommate at approximately 11 p.m. Associate Dean for Students Robert M. Randolph said the deceased had apparently ingested something and that a note was also found.

The cause of Thompson's death

is pending, said Charles McDonald, Director of Communications at the Suffolk County Executive Office of Public Safety.

Thompson was from out of state and had a summer job in Boston. Randolph said she was living in a triple at ATO with two other Wellesley students.

She was last seen in the early evening by friends, Randolph said.

"We at ATO are truly saddened by the unexpected death of one of our summer boarders," said ATO

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OpenCourseWare Receives Funding From Mellon, Hewlett Foundations

By Joy Forsythe
STAFF REPORTER

The first phase of OpenCourseWare is underway. With financial contributions from two foundations totaling \$11 million, an interim management committee is setting up an infrastructure for the online initiative.

The Andrew W. Mellon and William and Flora Hewlett Foundations have each donated \$5.5 million for the pilot phase of the program, a project that intends to place 500 courses online in 27 months at a cost of \$12 million.

OpenCourseWare will make

MIT material such as course outlines, lecture notes, assignments, and handouts available on the Internet. It is designed to benefit both the MIT community and people around the world.

"We're obviously pleased that [the foundations] are enlightened and interested in the benefits such a project can bring," Dean for Undergraduate Education Robert P. Redwine said of the foundations.

Greater access to course material may aid students and faculty. Students will be able to access all of the material associated with the course they are taking at any time and have

more access to information about courses they are considering. And it may be easier for faculty to get their material out to their students and see what other professors are doing in related subjects.

The project's offerings are not intended as a replacement for classes, and no credit or degrees will be granted through OpenCourseWare. Associate Dean of Engineering Dick K. P. Yue '74 describes the project as "not a door; more like a window" for those outside MIT.

Yue was instrumental in the cre-

OpenCourseWare, Page 25



Fuel rocked Cape Cod residents at the Melody Tent in Hyannis on June 28. See review in Arts, page 14.

Institute Examines Dining Rooming for New Dorms

By Jeffrey Greenbaum
STAFF REPORTER

The Office of Residential Life and Student Life Programs (RLSLP) will add one new undergraduate and two new graduate dormitories within the next two years to guarantee on-campus housing for more students.

The Simmons Founders Group projects that Simmons Hall, the new undergraduate dormitory, will open in time for Orientation 2002. To develop a Simmons community, the Founders Group will be meeting with prospective Simmons residents to organize the dorm life. The Founders Group will discuss issues, such as a mandatory meal plan for its dining hall, with the prospective residents.

Graduate students will begin living in 224 Albany Street (Building NW30) on August 16. Only first-year graduate students can occupy NW30 for a period of nine months, as governed by the lease, because the dorm

has been financially organized to host conference guests during the summer.

The other graduate dormitory, 70 Pacific Street, is located on the corner of Pacific Street and Sydney Street. The building will house a maximum of 750 graduate students next fall. After its completion, MIT will house nearly half of its graduate students.

"We are very excited about these new dorms," said Karen Nilsson, Director of Housing Operations. "They are architecturally unique."

Innovative Dining

The Simmons Founders Group, led by its future housemaster, Professor Anne E. C. McCants, has established the framework for Simmons by including a two-level fitness center, a music practice room, a game room, a multi-purpose room, five laundry rooms, an Athena cluster, a

Simmons Hall, Page 23



ARTS
Forget their
CDs — Fuel
rocks live.

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Comics

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The Tech interviews new MIT
Chancellor Phillip M. Clay PhD
'75, who shares his views on
graduate students, undergrads,
and everything in between.

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WORLD & NATION

Singapore Acknowledges Onset of Recession

By Mark Magnier
LOS ANGELES TIMES

TOKYO — Singapore said Tuesday it had slipped into recession, the first Southeast Asian nation to do so since the 1997-98 Asian economic crisis. But economists say it won't be the last.

"We're going to see a string of these, either extremely poor or negative numbers in the near future," said Song Seng Wun, Singapore-based regional economist with G.K. Goh Research. "They're all getting hammered."

Singapore's Ministry of Trade and Industry said the economy fell by a seasonally adjusted 0.8 percent in the second quarter over a year earlier. This is the second consecutive decline in its gross domestic product, which meets the definition of a recession.

Singapore is the first country to report its second quarter results, but Thailand, Taiwan and the Philippines, which also reported negative first quarter growth in its gross domestic product, could also turn out to be in recession when they reveal their second-quarter results in the next few weeks.

Singapore has been among the hardest hit by the U.S. slowdown, given that foreign trade accounts for three times its GDP. This compares with about twice GDP for Malaysia and 0.75 percent for the Philippines. Furthermore, a huge percentage of Singapore's foreign trade and manufacturing involves in particular electronic goods, which have seen demand fall off the retail shelf as consumers everywhere grow more cautious.

Federal Mediator Says California Might Not Get Power Refund

By Ricardo Alonso-Zaldivar and Megan Garvey

LOS ANGELES TIMES

WASHINGTON — A federal mediator said Monday that electricity suppliers overcharged California by only a fraction of the nearly \$9 billion claimed by Gov. Gray Davis, and suggested the state might receive no refund at all because its utilities' unpaid bills exceed the overcharges.

The mediator, Curtis L. Wagner, said after two weeks of hearings that refunds of up to \$1 billion probably were justified — a fraction of California's claim. But in an indication that California might come away from the proceeding empty-handed, Wagner added: "Can a refund be required when overcharges are less than the outstanding bill? The case judge thinks not."

Wagner said he would present his conclusions to the Federal Energy Regulatory Commission, which had given him 15 days to try to engineer a settlement between California and the energy suppliers. Monday was the 15th day.

FDA to Regulate Certain Fertilization Procedures

By Rick Weiss

THE WASHINGTON POST

WASHINGTON — The Food and Drug Administration has informed doctors that a controversial class of fertility treatments that until now has been performed without government oversight can only be performed with the agency's approval, marking the federal government's first significant foray into regulating the fertility field.

The FDA has long maintained that it has the authority to regulate fertility practices — a claim that some in the field doubt is legally assured — and has been edging toward doing so for many years. Until now, however, that oversight has been essentially limited to fertility doctors' use of drugs and medical devices, a level of regulation that has not raised alarms within the specialty since the agency regulates those areas in medicine generally.

Second Terrorist Receives Life Sentence for Bombing

By John J. Goldman

LOS ANGELES TIMES

NEW YORK — Again stating that execution might turn a terrorist into a martyr, a federal court jury Tuesday spared the life of a second man convicted in the 1998 bombings of two U.S. embassies in East Africa that killed 224 people.

At the start of their third day of penalty-phase deliberations, the jurors announced that they could not reach agreement on whether Khalifan Khamis Mohamed, a 27-year-old native of Tanzania, should be executed. That deadlock means an automatic sentence of life in prison without the possibility of parole.

Mohamed showed no emotion upon hearing that the jury had saved him from a lethal injection.

He was one of four followers of Islamic militant Osama bin Laden whom the same jury in May found guilty of bombing the embassies in Nairobi, Kenya, and in Dar es Salaam, the capital of Tanzania. Prosecutors said that the almost simultaneous attacks, which also injured more than 4,500 people, were part of a worldwide plot to kill Americans. Bin Laden was indicted in connection with the embassy bombings. He is a fugitive and

believed to be under the protection of the Taliban regime in Afghanistan.

On June 12, the jurors decided against sentencing Mohamed Rashed Daoud al-'Owhali, a 23-year-old Saudi Arabian, to death for the Nairobi bombing. He too received a life sentence. The two other men convicted of conspiracy in the case, 40-year-old Wadih El-Hage, a naturalized U.S. citizen born in Lebanon, and Mohamed Sadeek Odeh, a 35-year-old Jordanian, face automatic life sentences.

Mohamed had been convicted of murdering the 11 people who died in the Dar es Salaam explosion. Prosecutors charged that he had purchased a vehicle used to transport bomb components, rented the house used as the bomb factory and helped grind the TNT used in the device.

He was captured a year later, after fleeing to South Africa, where he worked in a fast food restaurant.

"This man decided on Aug. 7, 1998, that people could die in an embassy with a bomb he helped build, lined with TNT and made sure the truck got there," Assistant U.S. Attorney Patrick Fitzgerald told the jury during the penalty phase of the trial. "He didn't (care)

about the people he killed."

Fitzgerald said that when Mohamed was caught, "he threatened to do it again."

"What he has is ice in his veins, that's what makes him more dangerous because he coldly, coolly decided, 'I'll kill,'" the prosecutor said. "Zero remorse."

Government lawyers argued during the penalty phase that Mohamed would create a constant threat to guards and other correctional personnel if he were sentenced to life in prison.

They alleged that he had helped Mamdouh Mahmud Salim, another defendant awaiting trial in the embassy bombings, to attack a guard at the Metropolitan Correctional Center in November.

Guard Louis Pepe, 43, was stabbed in the eye with a sharpened comb, a wound that penetrated 2-1/2 inches into his brain, after being sprayed in the face with hot sauce. He was also stabbed in the skull with a sharpened hairbrush.

After the near-fatal attack, the guard — who lost the use of his eye — suffered a stroke that left him with partial paralysis and severely damaged his ability to speak and understand language.

Faith-Based Plan Draws Fire

Bush Seeks to Let Religious Groups Hire As They Please

By Jonathan Peterson and Edwin Chen

LOS ANGELES TIMES

WASHINGTON — From Catholic Charities in San Francisco to a Baptist home in Kentucky to Salvation Army posts around the country, faith-based groups have long defended personnel practices that collide with public laws.

Now, as President Bush pushes his plan to increase the role of religious groups in providing social services, many are clamoring to keep their special exemption to discriminate in hiring.

In a political firestorm Tuesday, White House officials backed away from a proposal to help the

Salvation Army fight for its right to discriminate against homosexuals.

But even without that provision, under legislation working its way through the House, faith-based employers would still retain broad, legal rights to discriminate on religious grounds when hiring — rights they were granted in the Civil Rights Act of 1964.

The bill will "ensure that religious organizations have the right to hire individuals who share their religious faith," said White House spokesman Ari Fleischer.

The dispute over discrimination is only partly about the right of faith-based groups to exclude staffers based on the clear-cut matter of religious affiliation. In addition, critics argue that such traits as sexual preference, pregnancy status, whether someone has been divorced and possibly gender

could be used by faith-based employers to veto potential hires or dismiss employees.

Courts have affirmed the right of a Catholic school to fire a teacher for marrying a divorced man, the right of a Christian retirement home to fire a Muslim receptionist who insisted on wearing a head covering, the right of a Baptist nursing school to fire an employee who became the minister of a gay-oriented church, and the right of a Catholic school to dismiss a teacher who remarried without getting her first marriage annulled under Catholic doctrine.

The broad exemption to the civil rights law reflects the demands of many religious institutions to retain their ability to hire those who fit in with their spiritual vision — but also has prompted calls for more rigid limits on possible bias in hiring.

WEATHER

Cool Wave

By Efen Gutierrez Jr.
STAFF METEOROLOGIST

A cold front that passed last night will bring in cooler temperatures compared to yesterday's hot and humid afternoon. However, moisture from last night's thunderstorm will give rise to more showers, which should last until Thursday morning. On a brighter note, this coming weekend will be very much cloud-free, since the next cold front is forecast to arrive early next week. Cooler temperatures are forecast for the following week.

Today: Mostly cloudy, with increasing chance of rain showers. High 75°F (24°C).

Tonight: High possibility for light to moderate rain. Low 59°F (15°C).

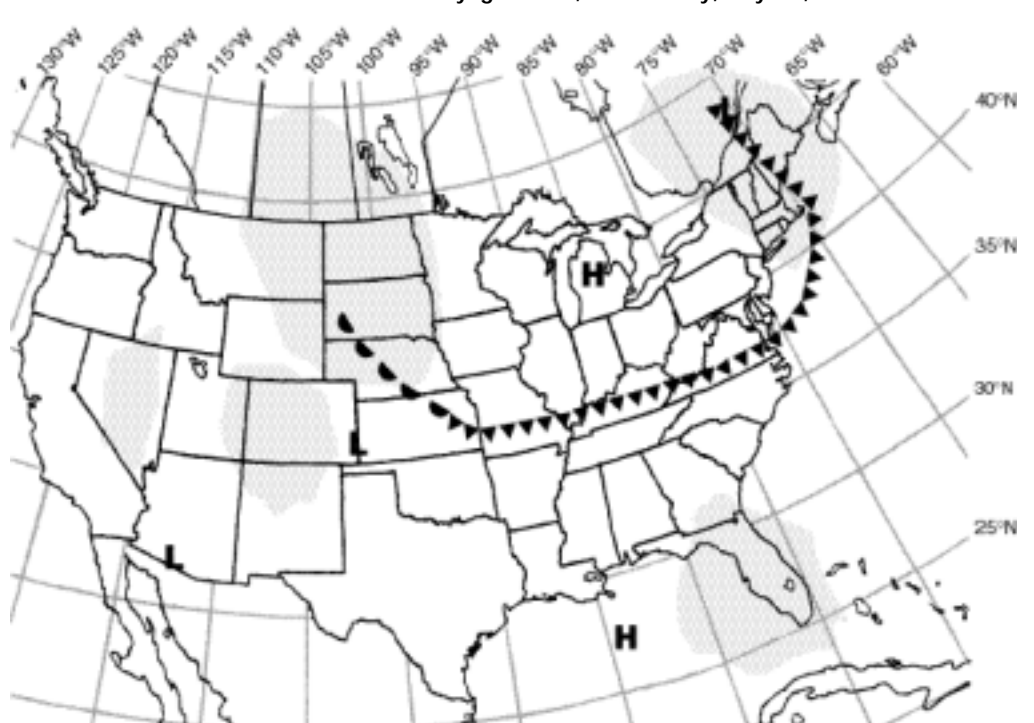
Thursday: Clouds will part for clearer skies. High in the upper 70s. Low in the lower 60s.

Friday: Mostly clear. High in the upper 70s.

Saturday: Sunny. High in the lower 70s.

Sunday: Sunny. High in the mid 70s.

Situation for Noon Eastern Daylight Time, Wednesday, July 11, 2001



House Republicans Campaign To Approve Energy Measures

By Peter Behr
THE WASHINGTON POST

House Republican leaders Tuesday began a hurried campaign to pass a package of energy measures before Congress's summer recess begins in three weeks, but left many key issues on the sidelines because of differences with Democrats and a lack of clear policy signals from the Bush administration.

A House Energy and Commerce subcommittee is scheduled to begin voting this week on a scaled-back legislative proposal that would increase federal subsidies for cleaner coal-burning technology, help more low-income households winterize homes and pay energy bills and call for more energy efficient television sets.

But a much longer list of high-

priority issues, including many in President Bush's energy plan, are stalled or tangled by divisions within the energy industry or between the industry and environmental critics. The delay could threaten action on the energy production and transmission problems cited by the administration eight weeks ago when it unveiled its program to address what it said was a looming national energy crisis.

"Whatever momentum there is (for comprehensive energy legislation) is dissipating by the day," said Randall Davis, a Washington attorney who was a White House energy policy adviser under Reagan.

Bush administration officials are finishing legislative proposals to deal with challenges to the nation's electricity system, including siting

of new power lines, transmission network reliability and the future of retail electricity deregulation. White House aides say the complexity of these energy problems takes time to resolve.

"If we were to rush through these things, you'd be asking, 'Don't these issues require more deliberation?'" said Dan Bartlett, deputy assistant to the president.

The test for the president is whether the window of opportunity for enacting major energy legislation will close this summer or fall before the administration can weigh in — and how much leverage Bush can exert.

"If you don't have the White House exerting leadership, I don't see where it comes from," Davis said.

Virginia Redistricting Challenged

ACLU, Republicans Accuse Each Other Of Gerrymandering

By Craig Timberg
THE WASHINGTON POST

RICHMOND, Va. — African-American lawmakers and the American Civil Liberties Union warned Monday that Republican plans for redrawing Virginia's congressional districts may violate the Voting Rights Act of 1965 by lessening the influence of black voters.

The charge threatened to throw a wrench into what Republicans, who rule both houses of the General Assembly, hoped would be a smooth two-day special session to adopt new congressional boundary lines to

account for population growth.

Complaints focused on the 4th Congressional District, which was won in a racially divided special election last month by J. Randy Forbes, a white Republican, over a black candidate. Virginia is among the first states to begin the once-a-decade redistricting process.

Under the original Republican plan submitted by Del. Jeannemarie DeVolites, R-Fairfax, the 4th District, stretching from the Richmond suburbs to Hampton Roads, would have gone from 39 percent black population to 32 percent, making it potentially easier for Forbes — or any other Republican — to win. African Americans are among the most reliable supporters of Democrats.

DeVolites, who defended her plan as legal Monday, raised the African

American population to 34 percent in a revision, but black leaders said the updated plan still dilutes the voting power of African Americans.

"My assessment is that's illegal," said Rep. Robert C. Scott (D), Virginia's only African American in Congress. "What happens to the ability of minority voters to elect a candidate of their choice?"

State Sen. Yvonne B. Miller, D-Norfolk, said of the DeVolites plan, "It's also making Virginia look like a state that's going through a second Reconstruction period, when we're rolling back the rights of African Americans."

Virginia is one of several southern states with a history of segregation that are monitored closely by the U.S. Justice Department under the Voting Rights Act.

Putin Takes Strong Stand Against Capital Punishment

By Maura Reynolds
LOS ANGELES TIMES

MOSCOW — Russian President Vladimir V. Putin's words were uncharacteristically strong and unequivocal — "I am against the restoration of capital punishment in Russia" — and they set off a fresh wave of controversy Tuesday in Russia over whether the country needs the death penalty.

The statement late Monday ended months of fence-sitting by the Russian president, torn between overwhelming support for the death penalty by his countrymen and overwhelming opposition to it in Western Europe.

In order to retain membership in European organizations, Russia has been halfheartedly observing a moratorium on capital punishment since 1996, but the statute permitting its use remains on the books.

Russian opinion polls show about 80 percent of respondents favor the death penalty.

Condit Offers to Let Police Search His D.C. Apartment

By Allan Lengel and Arthur Santana
THE WASHINGTON POST

WASHINGTON — Rep. Gary A. Condit will provide "whatever additional information or material" is needed by police searching for missing intern Chandra Levy, his attorney said Monday, including giving investigators access to his apartment, his telephone records and his staff.

Abbe Lowell, emphasizing what he called Condit's full cooperation in the Levy case, said at a news conference Monday night that the congressman would be willing to provide a DNA sample and would "listen" to police if they asked for a lie detector test.

Mars Launches New M&M's Variety Aimed at Latino Buyers

LOS ANGELES TIMES

Hoping to tap into the collective sweet tooth of the growing Latino market, candy maker Mars Inc. will launch a "dulce de leche" caramel variety of its popular M&M's candy in five markets the company said Tuesday.

The Hackettstown, N.J.-based company, the nation's third-largest confectioner, follows in the footsteps of such well-known food purveyors as McDonald's in trying to convert the popular taste — similar to caramelized or sweetened milk — into a retail hit.

The candy will feature a swirl of dulce de leche caramel and chocolate inside the traditional candy shell.

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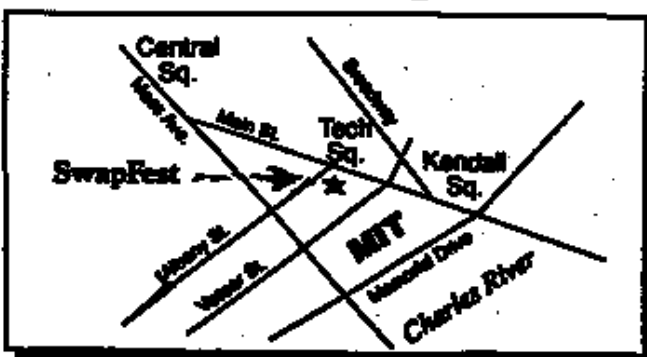
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Upgrades to 'Cable Upgrades'

I am writing in response to the article "Cable Upgrades to Digital" in the June 15 edition, which I feel requires clarification.

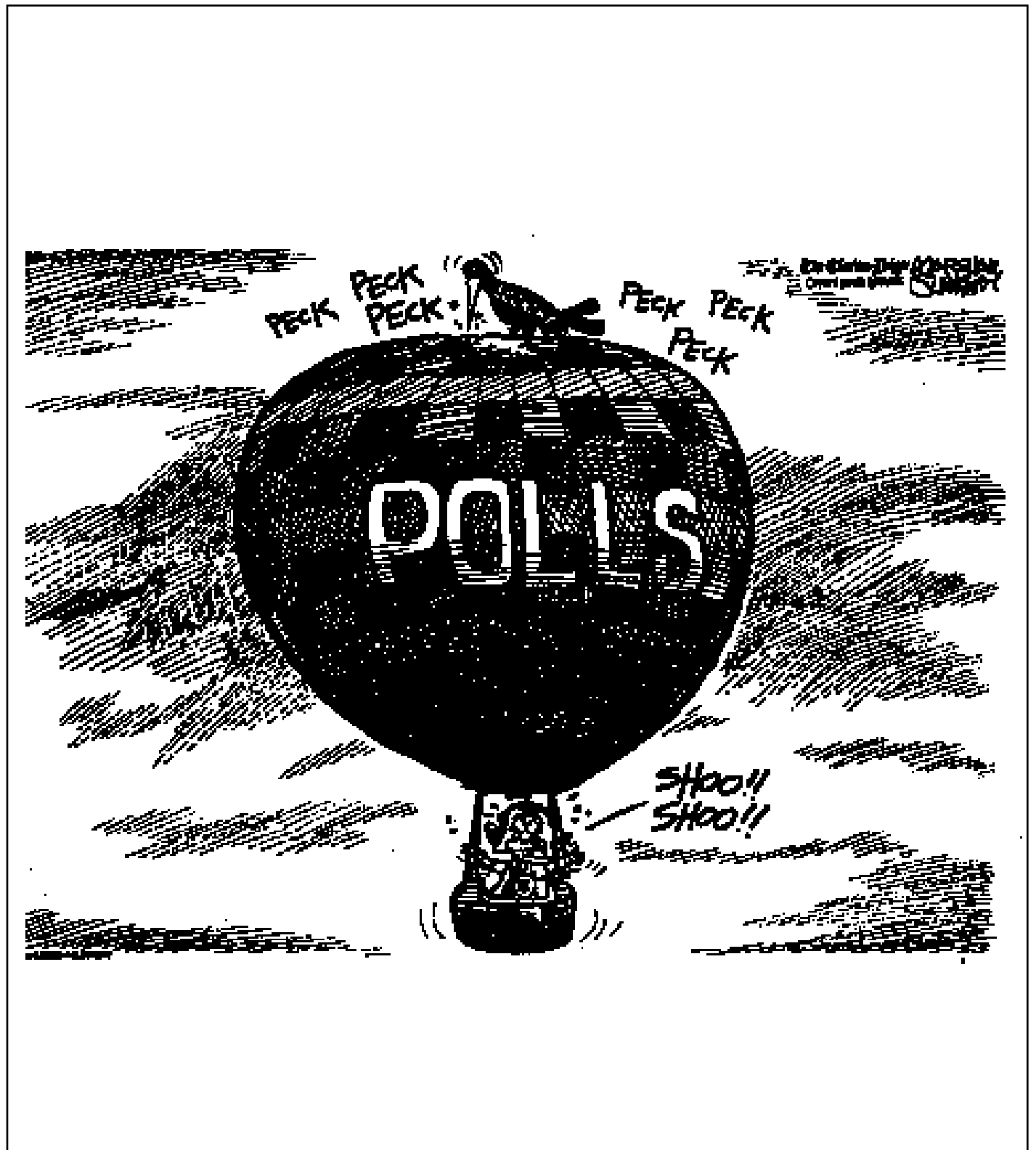
MIT Cable Television presently carries 48 channels. MIT provides 22 of these channels free of charge to all campus residents and to many offices, classrooms and other areas. This free service will continue to be offered and those who do not subscribe to pay services will still receive the same channels that they do now, although the channel numbering will change. The new digital service that MIT Cable will deliver beginning September 1 has two basic offerings: 60 channels for \$23.99 or 80 channels with 31 no-commercial stereo music channels for \$32.99 monthly.

By comparison, AT&T Broadband's basic service for MIT consists of 19 channels. In the time since the article appeared, AT&T Broadband has increased the monthly price of the MIT basic 19-channel service to \$16.15. The article states that Falls Earth Station was selected to provide the service mainly because it "would cost MIT nothing up front." Although my quote is correct, the emphasis added by the *Tech* article is misleading. Falls Earth Station was selected because their proposal addressed our concerns by greatly expanding the channel lineup and improving service. The MIT Cable Television Discovery Project at <http://web.mit.edu/is/discovery/cabletv/> provides much detail about the work that went into selection process.

Also, the statement that "AT&T Broadband's proposal would have eliminated individual subscriptions and instead sent one bill

to MIT" is not correct. AT&T Broadband has never made a proposal like this to MIT. Rather, it has been stated by several AT&T Broadband representatives over the past several years that billing individual customers would be discontinued and that MIT would be sent a "bulk" bill based on the number of connections our system provides. Connections that are available but not used are also billed, creating a situation where people who do not use the service subsidize it for those who do. I and others working with me have taken this seriously considering that AT&T Broadband currently uses this model at other colleges and universities and we do not think that it is appropriate for MIT.

Randy Winchester
Coordinator, MIT Cable Television
Project Leader, MIT Cable TV
Discovery Project



Opinion Policy

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Dissents are the opinions of the signed members of the editorial board choosing to publish their disagreement with the editorial.

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Letters and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. No letter or cartoon will be printed anonymously without the express prior approval of *The Tech*. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority. Once submitted, all letters become property of *The Tech*, and will not be returned. *The Tech* makes no commitment to publish all the letters received.

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Erratum

Shunmugavelu D. Sokka G was inadvertently omitted from the list of Stewart Award winners in the article "Awards Ceremony Honors Students, Faculty" [May 15].

Time to Retire Affirmative Action

Jyoti Tibrewala

The issue of affirmative action has returned to center stage. On June 25, the Supreme Court let stand the ruling in the case *Texas v. Hopwood*. This ruling led the state of Texas to end its affirmative action policies at its public colleges and universities. The state's education officials feel that this has left the state's public education system at a disadvantage compared to states with affirmative action policies.

Two cases involving the University of Michigan are on their way to the high court; one of these involves undergraduate admissions, which rates its applicants on a 150-point scale, giving Blacks, Hispanics, and Native Americans 20 extra points for their race.

The University of California recently decided to give more weight to the SAT-II exam — which test such specific subject areas as history, biology, and foreign languages — than the SAT-I exam in evaluating applicants. This decision coincided with a new freshman class in which the percentage of Hispanic and Asian-American students increased. Many suspect that the foreign language test may have provided an unexpected opportunity to students taking the exams in Spanish, Korean, or Chinese, as these languages may be spoken in the home.

Affirmative action programs were put in place to make up for past economic and social wrongs to minorities. However, these programs need to be dropped if the nation is to move forward.

In "past economic and social wrongs to minorities," the primary economic wrong being referred to is slavery, and the primary minority is the African-American population. But we as a nation are far past the days of slavery. We have also come out of the civil rights movement and the street riots of the 1960s which led to the establishment of

affirmative action. Today, blacks and other minorities are being accepted into the nation's top schools and making their way to the top of major corporations.

However, this is only due in part to affirmative action. Yes, affirmative action may have acted as a starting push to get minorities on the way to success. But achievement comes from a desire to succeed. One needs

vide the opportunity to sharpen his or her skills in English, complemented by its being spoken at home. The native English speaker will have a better grasp on the language than the foreign speaker, as it is the former student's first language, and he or she may have had more time to master it for that very reason. And English might prove more useful attending school in an English-speaking country.

Affirmative action may have been needed to get the ball rolling, but the ball is rolling already, and it's picking up speed as it rolls along.

In "past economic and social wrongs to minorities," the primary economic wrong being referred to is slavery, and the primary minority is the African-American population. But we as a nation are far past the days of slavery.

to set goals, and he or she must be devoted to that cause, accepting only excellence, never mediocrity; only then can goals be achieved.

Society has changed as well. Much of the racism present as late as the 1950s and '60s is nonexistent nowadays. This is basically due to a general increased tolerance. Attributing it to the workings of affirmative action would be a stretch.

It should also be noted that the case involving the University of California should not qualify as affirmative action at all. Mastery of a language is an important thing to have, whether it is learned at home or in school. For native English speakers who may feel cheated, take as an example a native speaker of Chinese. He or she probably learned the language as a child. Then, when school began, he or she had to learn English. A native English speaker will have been introduced to English as a youngster. Elementary and secondary schooling pro-

action has done its job, and as such it should be retired. The Supreme Court should take advantage of cases, such as those cited above, that are heading its way and are challenging the doctrine of affirmative action, and it should use the opportunity to help the nation take another step forward. One major argument for affirmative action is that it aims to level the playing field so that minorities and the majority are on equal footing. Eliminating affirmative action, though, would encourage everyone to stand on their own two feet. That's not to imply that some use affirmative action as a plateau from which the finish line is clearer. The goal is to eliminate the haunting question from a job or college acceptee of whether affirmative action or solid achievement is to thank. This in turn would challenge all of us to work our very hardest in everything we do, since we will be evaluated solely on the basis of our credentials. Only then will we all be on equal footing.

Laws Cloned from Hollywood

Kris Schnee

In the recent movie *The Sixth Day*, Arnold Schwarzenegger tackles the complex ethical issues of human cloning. Clones in *The Sixth Day* are slave beings grown in the glass tanks of mad scientists and used to bring back the dead with full memory of how Arnold killed them last time. When he discovers that he too is a clone, Arnold turns to the camera and pines, "Do I have a soul?"

Bad movies are easier to forget when your government doesn't start using them as inspiration for law.

On June 20, the Bush administration endorsed HR 1644, the harshest of several bills pending in Congress to ban human cloning. The bill, endorsed by Reps. Dave Weldon (R-Fla.) and Bart Stupak (R-Mich.), prohibits any creation of cloned human embryos, in contrast to the milder HR 2172 sponsored by Rep. Jim Greenwood (R-Pa.).

Greenwood's bill allows the creation of cloned embryos so long as there is no intent to bring them to term — it allows cloning for research, but not reproduction.

The Weldon-Stupak bill is a government power grab made in the name of legislating morality. The prime reason given in the bill for the cloning ban is that cloning poses "massive risks" to children. Does it? The first mammalian cloning attempt, Dolly, produced only one birth, a healthy lamb. Not stillborn, deformed, or otherwise "mutated," just an ordinary animal. The other embryos never came to term, just as a large percentage of human pregnancies end in natural termination. Years of research since Dolly have refined the technique, and it will only become safer and more successful in the future.

It is not Congress' business at all to

decide what medical procedures are safe. We have the Food and Drug Administration and other regulatory agencies for that; it is the job of experienced physicians and scientists to evaluate the safety of new treatments, just as they do for less controversial medicine. Safety is no justification for a federal cloning ban.

Nor is the other line of argument Weldon-Stupak advances: a complex of fear of the unknown and desire to control people for

natural advantages of health and intelligence through some future genetic process, these children are only "manufactured" goods, and can never rise above their biological destiny.

The opponents of cloning show a lack of respect for human life, for people's ability to be more than the products of their genes. Advances in biological technology will be used benevolently to improve people's lives, yet some want to ban them (thus denying them to all but the super-rich) because they fear that a cloned human would be enslaved or treated as less than human. But if this happens, will the culprits be the parents who love their child, or the lobbyists who despise his existence? Preserving our cultural notions of parental duty is not the government's job; nor do we need protection at the expense of our freedom as parents and children.

If you oppose cloning as a means of reproduction so strongly that you would deny it by force to everyone, reject the Weldon-Stupak bill in favor of the milder Greenwood one. Greenwood realizes that the use of embryonic cloning for medicine is a research pathway well worth pursuing. *Technology Review* estimates that 48,000 people in America alone are waiting for replacement kidneys. Hundreds of thousands die of heart failure each year in America; an estimated 2,100 were on waiting lists for hearts last year and didn't get

them. Human embryo research and cloning are a promising line of research which could save countless lives, and we need to protect the freedom of scientific research to maximize the chance that, when someone we care about is in danger from organ failure, we can save them. A vote to preserve human cloning as a legal option is a vote to pro-

Human embryo research and cloning are a promising line of research which could save countless lives, and we need to protect the freedom of scientific research to maximize the chance that, when someone we care about is in danger from organ failure, we can save them.

worry that cloning "threatens to weaken existing notions regarding who bears which parental duties and responsibilities for children." The implication of the bill's language is clear: in the mindset of the anti-cloning (and also the anti-genetics) crowd, biology is destiny. If two children are genetically equal, they are "copies," not distinct people (ignore identical twins). If children are given

mote human life.

The proposed cloning ban is in its early stages in Congress; there is still time to let our representatives know that cloning technology, far from threatening our "culture," is an expansion of human freedom and will save human lives. Keep cloning legal, and prevent a bad action movie from coming true.

Connecting MIT to Africa

Basil Enwegabra

MIT has shown through its extensive technological breakthroughs and expansive programs that it has no competitor anywhere in the field of innovative technology and scientific research. With its recent high-tech initiatives around the world, from the MIT-Germany program, MIT-Japan program, MIT-France program, MIT-Italy program, MIT-China program, and MIT-India program, to the Cambridge University-MIT alliance and MIT-Singapore alliance, the Massachusetts Institute of Technology has finally monopolized technological innovation and scientific research.

In Germany, for example, MIT students, researchers, and engineers have brainstormed a new strategy that could make Lufthansa the leading airline of the 21st century. In India, MIT is building a technologically advanced media laboratory (Media Lab) that could transform and give India a competitive edge in the ongoing global race for technological innovations. At Cambridge University, MIT scientists and students are working hand in hand with their Cambridge counterparts to share the benefits of cutting-edge technological and scientific research.

Although MIT has led the world of technological innovation for decades now, recently the speed with which it is advancing and modernizing has become incredibly high and beyond the grasp of other rivals. From human-centered computing, biotechnology, and nanotechnology, to neuroscience and microphotronics, MIT has dramatized the current race to technological innovation and breakthroughs. Cutting-edge technological transformational vision and challenges have made this top technical university a technological icon. Or how could these innovations in biotechnology, microphotronics, and nanotechnology be explained to the scientific and technological world? What about the ongoing translation of knowledge into dramatic advances in medicine, energy, and materials, all leading to new ways of treating heart attacks, cystic fibrosis, and cancer?

These ongoing discoveries and inventions at MIT are changing the face of future technology forever. For example, nanotechnology advancement has already led to the creation of unique materials and structures that now trigger the race to microscopic nanomachines and microphotronics innovations, optical devices and circuits on the same size scale of computer chips. Microphotronics alone has revolutionized telecommunications, data communications, and computing.

This cutting-edge university also already researches in neuroscience, creating new understanding of brain and mind as well as potentially offering hope for new therapies and cures for illnesses such as Alzheimer's, schizophrenia and manic depression. The amazement and surprises developed by its high-tech researchers and scientists have led the Institute to believe that within the next 25 years the development of more sophisticated devices for diagnosis and therapy, such as imaging and virtual surgery, will not only be possible, but also readily and cheaply available to hospitals and medical centers around the world.

With these revolutionary expectations high, MIT's biomedical engineering is equally undergoing a major ideological change — that is, from the fusion of engineering with molecular cell biology to pushing the evolution of a new engineering discipline that should be appropriate to tackling the challenges of molecular and genomic medical changes. Also undergoing advanced modernization are MIT's school of Architecture and Planning, the Sloan School of Management, and School of Humanities, Arts, and Social Sciences. The changes have become inevitable, to make them fully ready to play the new role these technological revolutions are expected to impose on MIT.

How to make Africa and Africans benefit from the ongoing revolutions at MIT remains the greatest challenge facing MIT and Africans alike. While some believe that the way to begin making MIT's technological impact felt in Africa is through distance learning and teaching, others view the creation of an African technological window at MIT the most creative way the ongoing technological and scientific innovations taking place at MIT could also benefit Africa.

No Limit to Limits

Philip Burrowes

It could be said that this nation is fond of age limits. There are little to no merit-based requirements (depending on one's definition of "merit") for Congress, for example, but minimum ages of 25 and 30 are needed to join the House and Senate, respectively. Undergraduates probably care most about, that's right, being over 18 so they can vote and join the military. A few adolescents passing through these hallowed halls right around now may even be glad that they're past the various ages protected in the Fair Labor Standards Act of 1938 (or corresponding state ordinances).

Some may want to rush to the defense of the discriminated by denouncing such provisions as "age-ist" and unconstitutional. People like that are stupid, considering age limits show up in the third sentence of the Constitution, not counting the delusional preamble. They do, however, realize that there is often little concrete evidence to back up established age limits besides the fact that, hey, they've been established.

To underscore this, simply observe the rationale behind the voting age. Twenty-one was originally chosen because the prevalent social notions dictated that maturity was achieved by that time. Only adults would be generally responsible enough to vote deliberately and of their own accord. Children might not only lack the mental faculties to properly choose candidates, but could also be heavily influenced by their parents; a similar argument was advanced concerning women

and their husbands prior to the 19th Amendment.

Where is the age minimum for members of the Electoral College, however? At first it might seem that Article II is deferring power to the states in some sort of appointment quid pro quo. Upon further inspection, that seems dubious, as even the pre-17th Amendment Constitution spends the entire first article telling the same states exactly how Congress is to be run. Presumably an elector's stature is validated because he is appointed, but that mandate does not render moot the

The fact, however depressing it may be, is that there are people who will be smarter yet younger than you, and you will be more capable than many older than you.

minimums for Congress. Nor does it hold that age doesn't matter, because obviously if younger voters could be bullied, younger electors would be just as — if not more so — susceptible.

For those who think such seemingly arbitrary provisions are relegated to obscure federal laws and Constitutional clauses, take a look at the world of professional basketball.

The collective bargaining agreement between the National Basketball Association and the players' union actually does set a minimum "age" for the athletes, under which they cannot be signed if their high school class has not graduated. Primarily, it seeks to ensure a modicum of physical and emotional maturity because presumably teams could bully prodigies into joining their organizations. Either that or, akin the voter and his congressman, teams would be better off with older players.

Like the ages required for federal office, neither contention is supported by evidence. Young athletes are far more likely to fall victim to agents, economic pressure, or their own inflated egos than a general manager, and a player's actual ability does not seem to map conclusively to age (take Tracy McGrady, 22, and Nick Anderson, 33).

People who complain about this tend to favor an increase in the minimum age, considering the glut of NBA players without college degrees. Where are these people to decry the absence of experience or education in politics? Granted, the ramifications on basketball seem to be more pronounced than the current state of government, but the train of logic is the same.

Basketball also displays perhaps the main problem with age standards, and that's their disjunctive nature. Lobbyists seek a return to the pre-American Basketball Association days of early entry lockouts while teams become all the more willing to draft "youngsters." Going back to the government, the higher the political office, the higher the required age,

For those who think such seemingly arbitrary provisions are relegated to obscure federal laws and Constitutional clauses, take a look at the world of professional basketball.

yet some of the most memorable officials have been young ones. The clincher for foreigners is the difference between drinking age and voting age, a byproduct of the 26th Amendment. It's irrational, it's unwanted, and it's without good intention.

MIT has it right. Here, it is not out of the question to have proctors or even TAs who are your junior. The fact, however depressing it may be, is that there are people who will be smarter yet younger than you, and you will be more capable than many older than you. It is not so much that admissions evaluates on a case-by-case basis, but that it maintains some sort of identifiable standard — in the Institute's case hopefully intellect. Age in and of itself, to paraphrase the lyrics of the once ambiguously-aged Aaliyah, is nothing but a number. Nobody should suggest a test to vote and the like, but it couldn't hurt to know where you stand and why.

An unlocked gun could be the death of your family.
Please lock up your gun.



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Graduate Student Council

General Council Meeting
Today, 5:30pm
GSC Office, 50-220

Still some positions available for
**Institute Committee
Representatives**

Steer important decisions!
Applications available in the GSC Office
and on the web. Questions?
Email gsc-vice-president@mit.edu

Interested in graduate student issues?
Like to write, take photographs, design?

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GSC Office
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(617) 253-2195
<http://gsc.mit.edu>

Meeting Calendar

All meetings at 5:30pm in 50-220.

Food is provided.

General Council

Wednesday, July 11

Orientation Committee

Thursday, July 12

Activities Committee

Monday, July 16

Academics, Research and Careers Committee

Wednesday, July 18

Orientation Committee

Thursday, July 26

General Council

Wednesday, August 1

THE ARTS

FILM REVIEW★★★★

Pinocchio: A Spielberg Odyssey

Fairy Tale-like 'A.I.' Questions Boundaries of Humanity with Robot Child

By Erik Blankinship

STAFF WRITER

Directed by Steven Spielberg

Written by Ian Watson and Brian Aldiss

Starring Haley Joel Osment, Jude Law, David Swinton, Frances O'Connor, Sam Robards, Jake Thomas, Brendan Gleeson, Daveigh Chase, William Hurt, and Jack Angel
Rated PG-13

An endearing movie *A.I.* is not. It is a movie about robots, narrated by robots. Even though the star of the movie, little robo-boy David, might look like the cute little actor Haley Joel Osment, he brings awkward to a new level. Let's imagine what David's programming might look like:

10 print "Mom, do you love me?"

20 get A\$

30 if A\$ == "n" then goto 10

40 if A\$ == "y" then end

Now, if you are a robot like David, you follow these instructions pretty closely without much room for interpretation. If your mom isn't around or threw you away, you might get stuck in this routine for, say, a few millennia.

But why wouldn't Mom just love David back? That is the central question raised early on in *A.I.* Can we love our machines? Can we really love them?

Here at MIT, where we cheer for our 6.270 lego robot creations more than we do for any sporting event, it seems plausible to love our robots. If they asked to us to love them back, we might. Maybe. Might check the source code first.

STS Professor Sherry Turkle's research shows how children's perceptions of what is "alive" have been challenged over the last century. A hundred years ago, things that could roll were considered "alive." More recently, responsive games like Simon were considered quasi-sentient, while Tamagotchis puzzle children of today.

Spielberg's leap in this film is that adults will not be able to make the distinction between machine and man; that the Turing Test will not be solvable in the near future. And what will make this distinction impossible is putting *A.I.* into the form of children, playing upon Freudian archetypes we are unable to resist. Mothers are especially prone to this belief in Spielberg's film.

David enters the world wary of his father (Sam Robards), addressing him only by first name. He is ever eager to love his mother, "mommy" (Frances O'Connor), to have her constant affection. He does everything he can to reach that state. Even disobeying his programming.

Helping David differentiate between right and wrong is his very own Jiminy Cricket, in the form of robo-stuffed bear Teddy (voiced by Jack Angel). Teddy is so cool in the movie, he should be up for best supporting actor in the Academy Awards this year. Or better yet, get his own Teddy movie.

Overhearing the story of Pinocchio, and noting their similar real-boy aspirations, David decides he must find the blue fairy. For if he can become a real boy, then maybe mommy would truly love him.

But hardly anybody feels love across the mechanic-organic chasm. Mommy is often haunted by her doppelganger of a child. Daddy wants to have David dismantled at the factory. David's creator, the Geppetto-vest-wearing Professor Hobby (William Hurt), is primarily interested in marketing more Davids to families. Rogue gatherings of humans collect and mutilate robots in retaliation for their infiltration of our human lifestyles.

To save David from this technocidal fate, Spielberg once again appeals to our instinctual programming; the premise that somewhere in our super-ego is a fail-safe which prohibits the destruction of children. This is where the movie stumbles. Putting ourselves into the mindset of an angry anti-tech mob, intent on the destruction of machines, why not kill them all? Who cares how they are packaged? It's a televised robot war, a monitor

drop from the Green building, a spectacle of exploding machinery.

But Spielberg implores us to reconsider the innocence and importance of a child. Similar to how Oskar Schindler is guided by the unknown red-coated little girl to become a savior of humankind, Spielberg uses a robot child to make us reconsider how we treat machinery. Even if we cannot make this leap ourselves, within Spielberg's fable the chasm is crossed.

This loveless environment is the stage for this sci-fairy tale, where technological props stand in for the traditional folk story elements. Future pleasure palace Rogue City (a shared neon set from *Moulin Rouge*?) appears as *A.I.*'s answer to Pinocchio's "Temptation Island." Instead of misbehaving men turning into donkeys, the boundaries between human and artificial are further blurred; love and sexual servicing are conflated.

The consequences for our illicit, abusive relationships with our creations are hauntingly dire in *A.I.* Our devices are left to blankly love us in return, iterating endlessly on the meaning and process of love, while empty trying to solve the puzzle of humanity.

At the end of the film, the role of god-like creator is taken from Geppetto, and assumed by the machines, which now create human lives to love robots. It should be an eerie, unnerving future where only echoes of humanity reverberate. But Spielberg plays down the haunting sci-fi aspects, focusing on what the machines were programmed to acquire: the love of humans. We have to remind ourselves that this is a horrifying future, one where David completes his Oedipal quest to take his father's place in his mother's bed. But it is told lovingly, as a fairy tale, an ever-after ending.

The tale is told from a child's perspective, without knowledge of the bizarre humanless nature of the character's motivations. The fears of abandonment play on emotional chords I recall as a child. The future "mechas" (as opposed to "orgas" — living beings) appear as creatures that Spielberg's imagination was haunted by as a child at night.

The suspension of disbelief required to accept the motivations of the fairy tale *A.I.* are far more than many adult film goers have been willing to make. I found myself repeatedly reminding myself of my own childhood fears and strange beliefs, and letting the film play upon these lingering frames of mind. Spielberg suggests that this is the mindset of the sentient machine, a mind we have created which cannot separate reality from fantasy. It is an interesting proposition and a cruel predicament.



A child-bot, David (Haley Joel Osment), finds himself facing technocide in Spielberg's *A.I.*

RESTAURANT REVIEW

Saffron — Indian Jewel

Indian Fusion that Lives Up To Its Name

By Scott Lee

STAFF WRITER

Saffron

279A Newbury St.

Back Bay, Boston

617-536-9766

Saffron is a spice derived from the fall-flowering plant of the same name that is native to Asia minor. For centuries it has been prized as one of the most precious ingredients of cooking in the old world. It is estimated that the stigmas of 4,000 flowers are required to make one ounce of saffron powder. Such a name for a restaurant lends itself to high expectations of the cuisine to come.

I visited Saffron in the middle of the day, during the hustle and bustle of a Newbury Street crowd. The open patio seating on this street makes for some interesting people-watching, and, during the summer months, it is particularly pleasant. That is, of course, if you bring your own sunblock. Some of the tables are without parasols, and if you prefer not to get skin cancer from Saffron, you might want to move inside or get a shaded seat.

Once comfortably seated at one of the many shiny metallic tables surrounded by a hedge of protective shrubbery, a menu of both traditional Indian and Western fusion cuisines is brought out. I tried a variety of appetizers, soup, and entrées from both the American and Indian sides of the menu.

Of the appetizers, the chicken chaat was the standout. It was an atypical preparation of chaat, a light meat salad dish mixed with a cucumber and yogurt sauce. The addition of

extra spices created a dish with zing, more zing than the simple creation of a traditional acidic base. The shrimp maseladar was flavorful and well prepared. Though the garlic and ginger were not prominent, the crunch of the poori bread and the oiled vegetables created a nice gustatory texture.

The presentation of the entrées was most impressive. The artistry of the paneer ravioli was evident by the use of four or five colors in creating a well-balanced work of art. The sweet aroma and juxtaposition of the ravioli beneath a crisp and dry, deep-fried leek, created a successful entrée.

The vindaloo pork chop was another dish that was presented skillfully. When I think of vindaloo, however, I think of burn-your-tongue-off spiciness. This was a mild rendition of a vindaloo dish, using maybe a pinch of the spice, which only required maybe one glass of wine to clear my palate.

The halibut was very fresh, with the appro-

priate amount of coriander and cumin. This may have been the best fusion dish, as it effectively balanced the old world with new-world flavors. Cooked perfectly, it had a nice gelatinous center that melted deliciously. The tomatoes accentuated the dish with a tartness that complemented the beans and fish.

The tandoori at Saffron was relatively standard. There were no surprises here. The quality of the dishes was up to par and the meat was neither overly juicy nor dry. The portions were large and were more than sufficient for a person's weekly dose of tandoori.

Of the breads, the aloo paratha and garlic naan were fresh and made well. The aroma of the garlic wafting to Newbury Street was enough to turn the heads of many Gucci-clad pedestrians. These delicious breads were nice accompaniments to the meal.

Dessert concluded with the kulfi (a type of pistachio ice cream), which was beautifully prepared. Many fruits were puréed to create a rainbow of flavor and color that was placed beneath a base of noodles and cardamom-infused scoops of kulfi. It tasted fine, but the vermicelli was mysterious — is it a garnish or not?

Saffron's decor is thoughtful and tasteful and the dishes were exquisite creations of taste and presentation. The dessert alone was an outstanding and addictive fare. Saffron's excellent service, atmosphere, and food is a welcome jewel on Newbury Street.



Diners at Newbury Street's Saffron enjoy the atmosphere and delicious food.

WAN YUSOF WAN MORSHIDI—THE TECH

VIDEO GAME REVIEW

Sonic Adventure 2 Arrives

Celebrating a Tenth Anniversary In Style

By Jumaane Jeffries
STAFF WRITER

'Sonic Adventure 2'
Published by Sega
Made for Dreamcast
\$39.99

Very few people can forget how Sega set the world ablaze ten years ago with the furiously fast, gravity-defying game play of *Sonic the Hedgehog*. Set in fantastically colorful and elaborate worlds, the quest to save the world from Dr. Robotnik allowed players to either stop and explore, or run like the wind and never look back. Now Sega pays tribute to the legacy in *Sonic Adventure 2*, the sequel to the Dreamcast's flagship title.

This time around, as the heroic trio of Sonic, Tails, and Knuckles again faces off against Robotnik, two mysterious new villains join the fray. The nature of good and evil is embodied in Shadow, a black hedgehog whose own legacy is tied to Robotnik's family, and is on an unknown quest for redemption and revenge. Shadow and the Doc are assisted by Rouge the Bat, a relentless female Emerald hunter and a "vamp" in every sense of the word.

In a new twist to the series, you can take on two particular quests: that of either the Hero Side or Dark Side. As such, each character has a nearly identical counterpart. As Sonic or Shadow, you play the light-speed stages that have defined Sonic for a decade. Tails grows up a bit in taking on Dr. Robotnik as they each battle in Mechwarrior-style robot walkers, similar to the "shoot-em-up" stages of E-102 in *Sonic Adventure*. Knuckles reprieves his role as guardian of the Emeralds, while Rouge serves as his foil in each of their own seek-and-find stages.

The Sonic/Shadow stages flow crisply and smoothly, with no hint of slowdown, and none of the weird collision-detect problems of the original *Adventure* remaining. The wizards at Sonic Team even attempted to alleviate the phenomena where the game seems to play itself (the up-button phenomena) by adding more suddenly appearing pitfalls and obstacles. Surely these action stages will take a lot longer to master, especially with all the hidden tricks for which you can get bonus points, but it adds to the replay value, so it's all good. As Tails or Dr. Robotnik, you just pretty much blast everything in sight, but it's a good little action shooter that's fun to play once you get accustomed to your aiming mechanism.

Most of the game's ire comes from the Knuckles/Rouge stages, which are a true test of patience. The goal is to find three objects of some kind — usually pieces of the Master Emerald — and there is a tracking indicator to guide you along the way. Unfortunately, the tracker only has three distinguishable degrees of proximity (green, yellow, red), which is actually less reliable than what Knuckles had in the previous *Adventure*. Furthermore, the camera faux pas that sometimes detracts from the 3-D Sonic experience occur most often here. The chal-

lenge can be unwelcoming when the size of the stage exceeds "freakin' huge." The going gets even tougher with the inclusion of time limits in later stages.

The feeling of improved overall control can be attributed to the fact that the graphics are exquisite, and is possibly this game's biggest improvement over the original. They're polished nearly as well as graphical Dreamcast gems like *Dead or Alive 2* or *Phantasy Star Online*. And the characters are actually fun to watch in the cinematic scenes, much more capable of facial expression than ever before. It's just like a 3-D version of the *Sonic the Hedgehog* cartoons (remember those?).

The sound effects haven't changed much from *Sonic Adventure* (like they've changed much from *Sonic 1?*), and still include the standard boings, screeches, and explosions. The music, while really good, sometimes drowns out the voices with its own lyrics, which is unfortunate for those who prefer the more suitable Japanese voices. That's right, there's a full-fledged soundtrack, where some bleepy, boingy music plays alongside Sonic's rockin', upbeat tunes. Others, such as Knuckles's various themes, kick some mad flavor. (Or at least they really try.) Rouge's sexy jazz tunes are decent as well. It makes spending 45 minutes trying to finish their respective stages almost worthwhile. Almost.

Did I try to conclude this piece without mentioning SA2's billions of extras? At the risk of writing another article, I must say that the mini-games will make you want to relive this *Adventure* over and over again. Each and every stage offers rewards for missions involving ring collecting, Chao searching, and other tasks. And when you're done with that you can grab a friend and engage in some two-player action. Sonic and Knuckles battle Shadow and Rouge, respectively, in their two player race-to-the-finish vertically split-screen stages. Or you can have a mech-war between Tails and the Eggman. There's even competitive cart racing, though the handling on the cart is a little askew. When you tire of incessant speed, you can raise a Chao with the animals and "Chaos Drives" you collect. This time, in addition to racing and feeding, you can do such things as modify its nature and even put it in Chao World's kindergarten, in order to prepare it for *Chao Adventure 2*.

All of those extras aside, *Sonic Adventure 2* is an outstanding new addition to the slowly growing Dreamcast lineup, and practically a steal with a \$40 price tag. It has improved graphics, stunning gameplay, and even an entertaining, if still primitive storyline. You'll have a lot of new adventures to undertake, and a lot of treacherous rails to grind.

Graphics	9.5	Gameplay	9.0
Sound	9.0	Replay Value	9.5
Overall Rating	9.5		
ALL SCORES OUT OF 10			

VIDEO GAME REVIEW

Super Mario Advance

Before There Were Goombas

By Chad Serrant
STAFF WRITER

'Super Mario Advance'
Made for Gameboy Advance
Published by Nintendo
\$29.95

When Nintendo releases a new console system, a Mario game is always released. Its mission is simple: show what the system is capable of, and provide some fun, too. Usually, the fun part appears in the form of an all-new, exciting adventure that will open your eyes to the future of video gaming. *Super Mario World* on the SNES showed how large a world could fit on a tiny cartridge. And *Super Mario 64* taught players to explore and backtrack to previous worlds. *Super Mario Advance*, however, uses some of the older Mario games to demonstrate its power.

Basically, *Super Mario Advance* contains *Super Mario Bros. 2* and *Mario Brothers* (not to be confused with *Super Mario Brothers*, by the way). These two games are ... well, they aren't anything like the other Mario games.

Super Mario Bros. 2 is the most irregular Mario game of the bunch. Mario and his friends stumble upon the dream world of subcon, where the evil Wart has taken control.

Two things that make this game different from the other Mario games is that you can choose between four characters (Mario, Luigi, Toad, and the Princess, Peach), each with different strengths and skills. Mario is average, Luigi jumps high, Toad can grab things faster, and Peach can float. There are some stages that are easier for some characters to handle than others.

The other big difference is that you attack enemies by throwing things at them. Stomping does nothing. This game takes the most fundamental attack in platform games, and throws it out the window. It is a great game, but was it really the best title to use for a launch title?

Also included on this is *Mario Brothers*, the first *Mario Brothers* game, before there was a Bowser, before there were goombas. It was the day when Mario and his brother Luigi were Italian-Americans living in Brooklyn working as plumbers. There aren't any alligators in the sewers, but there are a lot of weird lookin' creatures in it. You have to knock them from below to turn them over, then kick them. With a large variation of enemies and a frenzied pace, this game is great for people who want to run around for a small amount of time.

The frenzied pace is also great for multi-

player. With one cartridge, you can play with up to four people, either cooperatively or competitively. Either mode will keep you on your toes as you try to beat your friends to the points.

As I said before, *Super Mario Advance* is supposed to demonstrate the power of the Game Boy Advance, and it does. In *Super Mario Bros. 2*, when you throw things, they rotate. You can also notice rotational effects when you enter the magical pots. The background features a lot of rotating gears and a strange ferris wheel. Many enemies are huge and will scrunch under your weight if you jump on them. This game shows a lot of rotation and scaling.

There is also a musical improvement. The background music sounds as good as it did in the Super NES version. And the characters have voices. People have various opinions on the voices. You see, they seem to have a phrase for every possible maneuver: jumping, getting energy, taking damage, losing a life, completing a stage, walking, eating, sleeping, writing essays ... sorry, I trailed off. The point is, they won't shut up. That, and Toad has a very shrill voice. Very. The voice he had in *Mario Kart 64* was a lot more enjoyable than this. In the end, you will find the voices charming yet annoying or obnoxious. Take your pick.

I'm a little concerned about the game selection for this launch title. I don't know why, but I was hoping for more than *Super Mario Bros. 2* and *Mario Bros.* Maybe I expected a new adventure. Or maybe I hoped that they would put all of the old Mario games on one cartridge, like they did in *Mario All-Stars*. Or maybe it's because I like *Super Mario Bros. 3* more. For newbies, this will be a great game that shows how varied platform games can be. But for those who have played these games already, this is not worth the purchase.

IMAGES COURTESY NINTENDO



Graphics	8.0	Gameplay	7.5
Sound	8.5	Replay Value	7.0
Overall Rating	7.0		
ALL SCORES OUT OF 10			

MUSIC REVIEW

Shankar Thrills Carnegie

Captures Essence of Indian Classical Music

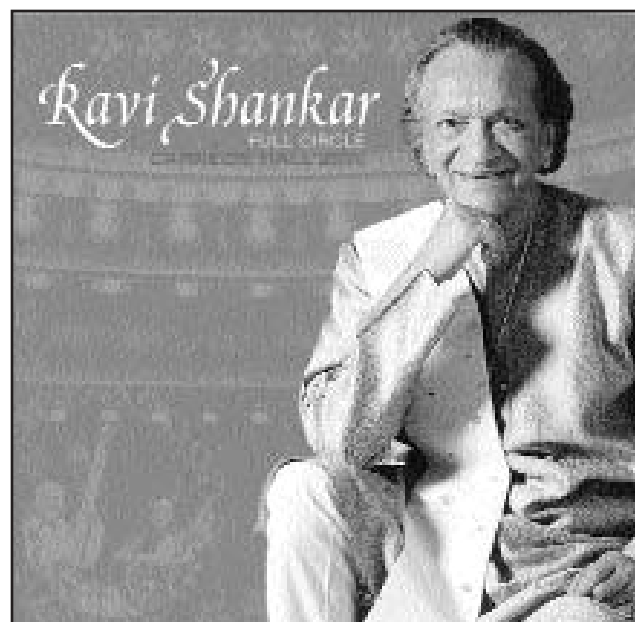
By Shankar Mukherji
STAFF WRITER

Called by many the "doyen of Indian classical music," Pandit Ravi Shankar performed to critical acclaim last October in New York City's Carnegie Hall. The concert, recorded and released by Angel Records, featured both newly composed pieces by Shankar as well as his family's next generation of artistic talents as daughter Anoushka Shankar accompanied on the sitar. For Shankar the concert marked a return to Carnegie, where he first performed as a dancer and instrumentalist in 1938.

Although ostensibly composed in a very traditional form, Shankar does not blindly follow the style of his musical forebears. In the *Alap*, or opening, section of the *Raga Kaushi Kanhara*, a night *raga*, the sitarist clearly is attuned to the harmonic blends of his notes with those of the *tanpura*, a stringed instrument used for its drone effects, in a manner reminiscent of the Western musical tradition. At the same time, however, the composition remains grounded in its Indian classical roots as Shankar repeatedly intersperses expressive, slurred phrases with highly rhythmic, nearly staccato notes thus driving the beat even in the

absence of the *tabla*.

The next section, the *Gat*, is performed in the 14 beat cycle *dhamar taal*. The entrance of the *tabla* allows Shankar to dance around the rhythm, interleaving short trill sections within the main melodic line of the *raga*. Fur-



thermore the sitarists make exquisite use the 5-5-4 division of the beat cycle in their rapid runs, especially in conjunction with the creative mixture of on and off beat notes. The end effect is one that keeps the music, based on an ancient melodic line, fresh and exciting.

This idea of grounding the melodic line in a particular rhythm while keeping the music from being predictable is best witnessed at the end of the section. The extremely effective *crescendo* and *accelerando* up until the *raga*'s conclusion is met with enthusiastic applause.

The second *raga* presented, *Raga Mishra Gara*, according to Shankar himself, "is played in the contemporary Khyal and Thumri forms." As he further explains, he changes from the *raga*'s tonic note, *Sa*, to the fourth, *Ma*. Described as a light, romantic *raga*, Ravi Shankar and daughter play the piece in a technically precise manner, again exemplifying the Indian classical emphasis on rhythm and melody.

In this *raga* the *tabla* enters soon after the opening which again allows the main voices to develop the melody from one of simple to complex lines. The melody of the slow section of the *Gat*, in fact, can be described as almost song-like in its simple beauty at

onetime and highly ornamented nature the next, clearly the result of the highly improvisatory nature of the art form.

The slow section features the bass *tanpura* prominently, played by Ajay Sharma, adding a highly effective contrast to the melody of the *sitar*; the elder statesman of Indian classical music then effectively closes the slow section with a highly intricate melodic run, showing that even at age 80 his fingers are still nimble enough to race up and down the instrument.

The transition to the fast section of the *Gat* is extremely smooth as the *tabla* is able to seamlessly translate the rhythm to the new, accelerated beat. The new section is built around a simple refrain which is repeated throughout the remainder of the *raga*. Flirting about the refrain, Ravi Shankar is allowed to display his full brilliance as a master of improvisation, using the full tonal range of his instrument as well as the full scale of his extraordinary sense of rhythm.

The final, frenetic moments of the *raga* bring to culmination all the emotion evoked in the melodic lines. It leads to a moment of catharsis in which the audience can lose itself in the musical storm. Despite the furious pace of the conclusion there is remarkable unity between the various instrumentalists, held together by an impressive display by *tabla* players Bikram Ghosh and Tanmoy Bose.

The concert clearly marks a triumphant 19th performance at Carnegie for Indian classical music's greatest ambassador. Shankar will be appearing at Carnegie again on the November 18 and will be coming to Boston on May 5, 2002.

VIDEO GAME REVIEW

Around the Track Again

Game Boy Advance 'F Zero' Is as Fast as Ever

By Chad Serrant
STAFF WRITER

F Zero: Maximum Velocity
Made for Gameboy Advance
Published by Nintendo
\$39.99

In the early SNES days, there was a racing game called *F-Zero*. Using the rotation of the SNES, *F-Zero* simulated driving from an over-the-shoulder perspective. It was a wonderful pseudo-3D effect. And there was a great racing game behind it, too.

F Zero: Maximum Velocity is the reincarnation of the SNES version. It has different courses, and the game physics are slightly readjusted. All in all, this is a very decent racing game that shows what the Game Boy Advance can do.

This is a racing game, and you have one mission: get to the finish line before everyone else does. You have five laps to do so, and if you're not ahead of a certain ranking after each lap, you lose. Of course, you can also lose if your car explodes. Oh yes. This game takes place in the future, where humanity gains violent tendencies. Running into walls



IMAGES COURTESY NINTENDO

hem, as well. If your friends only have one game, you can still play. But be warned: this is a very limited feature. You cannot choose a vehicle to race, and your choice of courses is very limited. When I tried this feature, my friend and I could only play on one course. If your friends have their own copies, then you can play on many more courses and you can choose many more cars to play with.

The graphics are on par with the SNES version, since it is using a similar technique. The thing is, you aren't moving. The racetrack is being rotated and moved underneath your car. It's a wonderful technique that gives an illusion of depth. The cars have more animation, so they are more fluid when they turn and slide. But nothing too spectacular.

The sound is a slight improvement over the SNES version. The music is new. It is fast-paced enough to keep you on your toes. The sounds of cars, boosts, and explosions sound the same, though.

F Zero: Maximum Velocity is a great racing game. But anyone who has played the SNES version may want to avoid it. It's nothing really new. You've done it already.

Graphics	7.0	Gameplay	8.0
Sound	6.5	Replay Value	8.0
Overall Rating	6.5		
<small>ALL SCORES OUT OF 10</small>			



causes damage, and there are in-road hazards that can damage your vehicle.

The driving is simple. The A button accelerates, the B button brakes, the top buttons can slide your vehicle and hitting them simultaneously will use a turbo boost. The entire key to turning is tapping the accelerator. You can handle any turn by tapping A at the right time. With this skill, you can easily cruise past Beginner level. Standard and Expert levels will require more racing skill. You will have to memorize the tracks and know the best way through them to succeed. When you do survive, you will get five more courses to endure.

This game is capable of multiplayer may-

VIDEO GAME REVIEW

Fire Pro Wrestling

Burning with Desire

By Chad Serrant
STAFF WRITER

'Fire Pro Wrestling'
Published by Bam! Entertainment
\$39.99

Fighting games are one of those genres of video games that concentrates on one of the smallest, least significant events in our lives: one-on-one battle. It is a very rare event indeed to walk down a street and be challenged to a duel. Most tournament fighting games concentrate on controller manipulation and good timing. Platform fighting games (like *Super Smash Brothers*) depend on using the right move at the right time. Wrestling games tend to combine both forms, allowing free movement around the ring, but still forcing you to time your attacks correctly. *Fire Pro Wrestling* is an excellent example of a wrestling game.

There is no story behind *Fire Pro Wrestling*. Your reason for fighting is to beat your opponents silly. *Fire Pro Wrestling* lets you wrestle the way you want to. Do you like to overpower your opponent with brute force? OK, that can be done. Do you like to move around the ring like a scared chicken, then lash out at the first sight of your opponent's weakness? That's fine. *Fire Pro Wrestling* lets you play the way you want to.

But no button mashing. The only place pressing random buttons repeatedly will get you is on the mat. *Fire Pro Wrestling* requires skill. When you begin a grapple with an opponent, you have to press the correct sequence first. If you try to mash buttons, you will always lose the grapple. Also, if you use heavy grappling maneuvers early in the match, you will be countered. The grapple system for this game is perfect. No longer can people win by pressing the grapple button faster than their opponent. They need skill to win.

Fire Pro Wrestling also uses fatigue to force you to use a variety of moves. If you just punch throughout a match, your character will tire out and won't be able to move for a while. And you will tire out every time you punch. Either hold the L button to regain stamina, or use a different move. Either way, you cannot depend on one move to get you through a match. Also, your fatigue levels can change depending on whether or not you are bleeding. Too many face rakes and a woman will scream, indicating that you have bled. Your recovery rates will change at this point, to your benefit or disadvantage.

There is no WWF or WCW or (insert favorite wrestling organization here) license, so *Fire Pro Wrestling* simply "made up" wrestlers who "coincidentally" have similar moves to the popular wrestlers. My favorite is The Cremator. He's tall with medium build, he wears gloves, and he likes choke holds. Also, the crowd always boos whenever he taunts. All of the imitation wrestlers look and operate exactly like their real-life counterparts, so you can unofficially set up your "dream team" of wrestling.

However, you'll have a lot more fun in the Create-a-Wrestler mode. One word: customization. There are options to edit every single part of the wrestler's body. There are 341 faces alone. You can also edit the colors of the costume (4096 ways for each piece of clothing, by the way). The moves your character can execute, his strengths, his weaknesses, his style of fighting — all of these can be edited to your liking. And you can save it to one of the 77 save slots on the cartridge. Or you could trade it to another cartridge if you felt like it.

The wrestling matches you can have are also customizable. You can choose the duration of the match, where you are wrestling, and which rules are legal. You can even employ UFC rules and have a "hardcore" battle.

The graphics quality is mixed for this game. The wrestlers show an incredible amount of animation. If you've seen the wrestling move in real life, you will recognize it in the game. Everything else, however, is pretty static. The referee has three to four frames of animation at the most, and there is no reason to change which ring you are fighting in; they all look the same once the match begins.

The sound is worse. It sounds like it was ported from the Game Boy Color, and will remind many of the NES game, *Pro Wrestling*.

Make no mistake. This is an excellent game that will test you timing and moving skills, instead of relying on button mashing. And, you can finally make the fighter of your dreams.

Graphics	7.0	Gameplay	9.0
Sound	5.0	Replay Value	9.0
Overall Rating	7.5		
<small>ALL SCORES OUT OF 10</small>			

MUSIC REVIEW

Life After 'Kid A'

Radiohead's Haunting New Release, 'Amnesiac'

By Sandra Chung
STAFF WRITER

Everyone's favorite five-piece band from Oxford continues pioneering in modern musical art with a variety of innovative sounds and introspective lyrics on *Amnesiac*. Lead vocalist Thom Yorke's keyboard taps atmospheric chord sequences, while Jonny Greenwood rewires his guitar and plays around with the synthesizer to create original sounds. Lanky eye-candy Ed O'Brien backs up Yorke's vocals with his subdued pipes and a wry rhythm guitar. Bassist Colin Greenwood and drummer Phil Selway strum and drum with musical finesse.

Many of the acoustic and electronic sounds have improvised or irregular rhythms. The songs themselves are uniquely structured, often lacking conventional harmony and melody lines. Though *Kid A* and *Amnesiac* were recorded at the same time and share the same moody, experimental flavor, each album has a distinct character. *Kid A* embraces futuristic and political ideas; *Amnesiac* is loaded with personal, aching images of human imperfections and secret dreams. Casual Radiohead fans beware; this is heavy stuff.

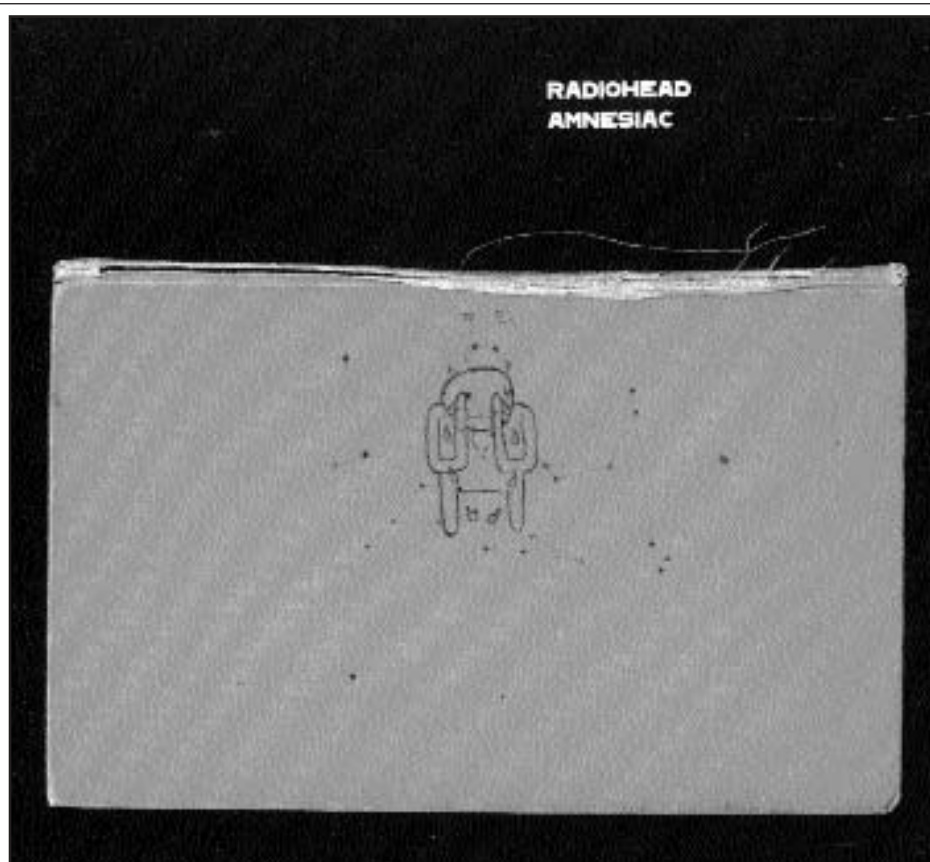
"Packt Like Sardines In A Crushd Tin Box" is a strange, multi-layered study in claustrophobia and a prime example of the weirdness of recent Radiohead. Vowels plucked from the title leave the consonant sounds overlapping each other like crowded fish. The piece describes a person who is all too aware of the oppressive confines of reality: "After years of

waiting nothing came/As your life flashed before your eyes/You realize/I'm a reasonable man/Get off, get off, get off my case." Greenwood's rewired guitar shrieks faintly in the background. Synthesized drums, a tin can drum, and various unidentifiable electronic sounds either sustain long, smeared notes or ricochet off each other in a complex mixture of syncopated and non-syncopated rhythms similar to Caribbean oil drum music. Three voices accompany Yorke's soft vocals — one an echo of his own voice, another a speaking woman, and the last a distorted male voice.

Yorke speaks of peaceful drowning in the "Pyramid Song," the album's slowest, simplest track, which is best described as musical water. Off-beat piano chords begin their upwards climb in half-steps and increase their jumps to whole steps, then fall in half-steps, evoking the rhythmic heaving of waves. Each line of Yorke's lead vocals begins with one of several patterns of ascending and descending pitches, echoing the wave motif.

In addition to claustrophobia and drowning, other tracks contribute to the album's eerie feel with ghost and witchcraft themes. Radiohead returns to the world of the living with the lush "Dollars and Cents," which comments on cutthroat capitalism and highlights Selway's excellent drum work.

The album version of "I Might Be Wrong" is the logical choice for a radio single. Standard electronic and bass guitar lines establish a recognizable rock sound. Aspects that stand out are Yorke's haunting voice, layers of synthesized bass and percussion, and distorted



COURTESY NLM

electronic whines. The most listener-friendly song, however, is "Life In a Glasshouse," which pleasantly surprises with a no-nonsense jazz band. The mixture of piano, clarinet, trumpet, trombone, drums, and Yorke's voice is what the blues would be like had they been invented in a London lounge.

The other U.S.-released Radiohead albums have a distinct unity to their tracks. In contrast, the pieces on *Amnesiac* seem to be pages ripped randomly from the threadbare diary of a

deeply introverted man. The CD book consists of 14 pages of tortured sketches and scribbled snatches of lyrics superimposed over each other in ghostly collages with as much morose complexity as the songs on the album. Radiohead taps a vast realm of cynical creativity for the waves of indecipherable percussive and electronic sound that make this album unlike any you've ever heard.

Radiohead plays Suffolk Downs on August 14.

Clubs

Axis
13 Lansdowne St., 617-262-2437

Sundays: See Avalon below.
Mondays: *Static*. Gay, casual dress. \$5, 18+.
Thursdays: *Chrome/Skybar*. Progressive house, soul, disco; dress code. \$10, 19+; \$8, 21+.
Fridays: *Spin Cycle*. Progressive house, 80s. \$12, 19+; \$10, 21+.

Avalon
15 Lansdowne St., 617-262-2424

Sundays: *Gay Night* (with Axis on long weekends). Featuring hardcore house and techno. \$10, 21+.
Thursdays: *International Night*. Eurohouse. \$10, 19+.
Fridays: *Avaland*. House. \$15, 19+.
Saturdays: *Downtown*. Modern house, club classics, and Top 40 hits. \$15, 21+.

Karma Club
9 Lansdowne St., 617-421-9595

Sundays: "Current dance favorites" by guest DJs. Cover varies.
Tuesdays: *Phatt Tuesdays*. With Bill's bar, modern dance music. \$10.
Wednesdays: *STP*. Gay-friendly, house. \$15, 21+.
Thursdays: *Groove Factor*. House. <None>
Fridays: *Pure*. Drum and bass, guest DJ. \$15, 19+.
Saturdays: *Elements of Life*. International House. \$15.

ManRay
21 Brookline St., Cambridge, 617-864-0400

Wednesdays: *Curses*. Goth. Appropriate dress required. \$5, 19+; \$3, 21+.
Thursdays: *Campus*. Popular tunes + House. Gay, casual dress. \$10, 19+; \$7, 21+.
Fridays: *Fantasy Factory* (First and third Friday of the month. Features kinky fetishes and industrial music.) *Hell Night* (every second Friday. 19+. Includes Goth music.) *Ooze* (the last Friday of the month.) \$10, 21+, reduced prices for those wearing fetish gear.
Saturdays: *Liquid*. Disco/house + New Wave. \$15, 19+; \$10, 21+.

Popular Music

Axis
13 Lansdowne St., 617-262-2437
Next: 423-NEXT

Aug. 9: Simon Says.

Avalon
15 Lansdowne St., 617-262-2424

Jul. 14: Reel Big Fish.
Jul. 21: Brian Setzer's '68 Comeback Special.

Berklee Performance Center

On The Town

A weekly guide to the arts in Boston
July 11 – August 15
Compiled by Fred Choi

Send submissions to ott@the-tech.mit.edu or by interdepartmental mail to "On The Town," The Tech, W20-483.

Berklee College of Music
1140 Boylston St.
Free student recitals and faculty concerts, 4 p.m. and 7 p.m. some weekdays. For info on these concerts, call the Performance Information Line at 747-8820.

Jul. 25: Rhythm of Love.

Club Passim
47 Palmer St., Cambridge, 617-492-7679

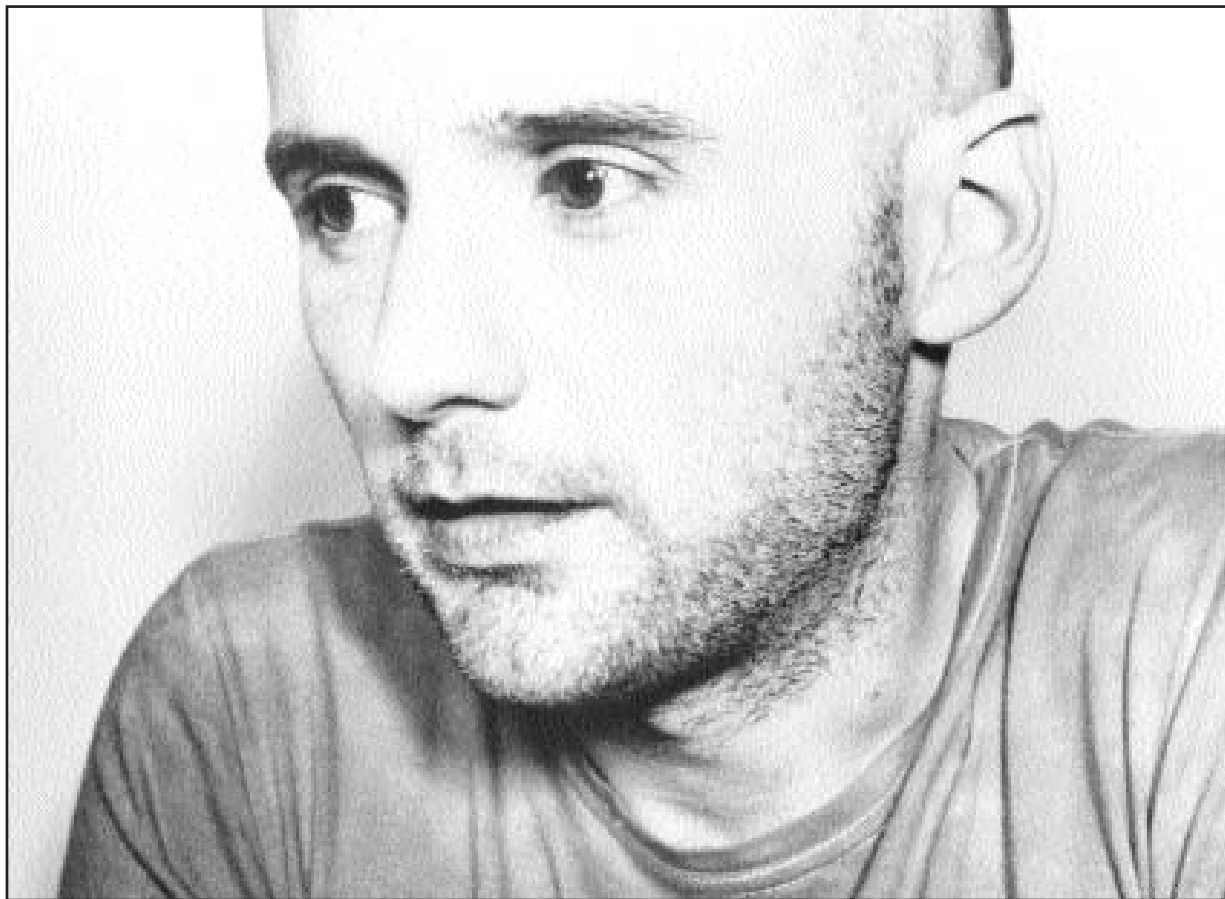
Tuesdays: Open Mic at 8 p.m. (Sign up at 7:30). \$5.
Jul. 11: Linda Sharar CD Release, Steph Corby.
Jul. 12: The Kennedys, Bob Malone.
Jul. 13: Lowen & Navarro.
Jul. 13: The Burns Sisters, Thea Hopkins.
Jul. 14: Mary Lou Lord, Jo Davidson.
Jul. 15: Teddy Goldstein, Stephen Kellogg, Ben Arnold and Brian Webb.
Jul. 18: Tara Greenblatt CD Release, Wendy Greenblatt, Stephanie Cornell.
Jul. 19: Albert & Gage, Dave's True Story.
Jul. 20: Laurie Lewis.
Jul. 21: Charlie Farren.
Jul. 22: Poet's Theater & Story-Lab: A Midsummer Night's Awakening.

Fleet Center

Ticketmaster: 931-2000.
Jul. 6-11: Backstreet Boys. \$124.50, \$68.50, \$48.50, and \$38.50.
Aug. 6, 8: Madonna.
Aug. 22: Sade/Lovers Rock Tour.
Aug. 25-26: Janet Jackson.

The Middle East

Central Square, 354-8238
Ticketmaster: 931-2000.
Jul. 11: Bellini Major Stars Fred Weaver.
Jul. 12: Yellowman.
Jul. 12: Crooked Fingers Johnny Dowd.
Jul. 13: Beatnuts With Gret Nice Arsonists.
Jul. 14: Psychotic Larry Canine Mary Prankster Toofsie.
Jul. 14: Vibewise Tjovi Ginen.
Jul. 15: Flickerstick Love-



MEI TAO

Moby (above) headlines a star-packed Area: One Festival Tour to Mansfield's Tweeter Center, carrying with him the likes of Nelly Furtado, Outkast, The Roots, Paul Oakenfold, and Incubus, among many others. Area One arrives this Wednesday, July 18.

less.
Jul. 15: Drowning Man Absolve Puritys Failure.
Jul. 16: Cephalic Carnage Neuraxis Stasis Kevorkian.
Jul. 17: Immortal Lee County Killers Quitter.
Jul. 17: Posies Pernice Brothers Chamber Strings.
Jul. 18: Rebecca Gates.
Jul. 19: Little Horse Miss Fortune.

Orpheum Theatre
1 Hamilton Pl., Boston, 617-679-0810
Ticketmaster: 931-2000

Call for schedule.

Tweeter Center for the Performing Arts (Great Woods)

885 South Main St., Mansfield, MA 02048
Ticketmaster: 931-2000

Jul. 13: Paul Simon and Brian Wilson.
Jul. 14: Stevie Nicks.
Jul. 18: Area: One Festival With Moby, Outkast, New Order, Incubus, Nelly Furtado and a separate DJ stage.
Jul. 19: Tim McGraw.
Jul. 25: Bon Jovi.
Aug. 8: Ozzfest 2001.

Jazz Music

Regattabar
Concertix: 876-7777
1 Bennett St., Cambridge 02138, 617-662-5000

Aug. 1: Sugar Ray and the Bluetones.
Aug. 4: Roomful of Blues.

Scullers Jazz Club
DoubleTree Guest Suites, 400 Soldiers Field Rd., Boston, 617-562-4111

Jul. 13-14: Jimmy Smith.
Jul. 17: Alma Vucinic.
Jul. 18-19: Gerald Albright.
Jul. 20-21: Diane Schuur.
Jul. 24: Ralph Irizarry and Timbale.
Jul. 25-26: Strunz and Farah.
Jul. 27-29: Flora Purim & Airtto.

Classical Music

Boston Symphony Orchestra at Tanglewood
Tickets: 266-1492.

Performances at Koussevitzky Music Shed, Lenox, MA unless otherwise noted. Call or check <www.bso.org> for full schedule, ticket prices, and times.

Jul. 18: Mitsuko Uchida.
Jul. 19: Yo-Yo Ma and Emanuel Ax.
Jul. 26: Emerson String Quartet with Yefim Bronfman.

Boston Pops
Tickets: 266-1492.
Performances at Symphony Hall. Call for ticket prices. Performances conducted by

Keith Lockhart unless otherwise noted. The Pops performs most days during the summer, generally at 7:30 p.m. on Sundays and Mondays and at 8 p.m. other days of the week. Check <www.bso.org> for full schedule.

Jul. 14-15: Symphony Hall sizzles as the Pops perform selections from their latest CD, *The Latin Album*. The program will also feature the Mexican folk group, Mariachi Cobre.

Jul. 17: At Tanglewood. After Jul. 17: On Tour.

Theater

The Real Inspector Hound

By Tom Stoppard. In *The Real Inspector Hound*, Stoppard ingeniously turns the

country-house whodunnit on its head, breaking down the wall between stage and auditorium. Two drama critics, each preoccupied with his professional status and personal dissatisfaction, go to the theater to see a new thriller. With great dexterity and comic talent, Mr. Stoppard involves these professional observers in the play with results that prove surprisingly serious for both. TheatreZone was founded in 1995 to produce innovative and socially significant theatre, and to make participation in the arts accessible to the community both as audience and participant through affordable prices, training opportunities for youth and adults, non-traditional casting, opportunities for artists to experiment and create new work, and the creation of a home for the arts in Chelsea, MA, the Chelsea Theatre Works. Performances are through July 28, Fridays and Saturdays at 8:00pm, at Actors Workshop, 40 Boylston Street, Boston conveniently located on the MBTA, one half block from the Boylston Station on the Green Line and Chinatown/Essex Station on the Orange Line. Tickets are \$12 in advance, \$15 at the door. Tickets can be purchased by calling 617-887-2336. Information on-line at <www.theatrezone.org>.

Tomfoolery

Jul. 13-14, 20-21, 27-28 at 8 p.m., Jul. 15, 22 at 3 p.m. At Tower Auditorium (621 Huntington Ave., Boston, MA). The Old Joke Peddler Tom Lehrer's brief but phenomenal career writing satire



PAUL BROWN

The Vans Warped Tour hits Suffolk Downs on Thursday, August 9. Of the many artists in the all-day lineup are Crazytown, Papa Roach (above), Disturbed, Linkin Park, Marilyn Manson, Spineshank, Drowning Pool, Taproot, Slipknot, and Black Sabbath.

FRED'S PICK OF THE WEEK

Twelfth Night

Jul. 20-21, 24-27, 28, 31 at 8 p.m., Jul. 22, 29 at 7 p.m., Jul. 28 at 3 p.m. Boston Common, Parkman Bandstand (Off Beacon St., Boston, MA). Traditional summer Shakespeare under the stars. After Viola is shipwrecked on Illyria, she disguises herself as a male page named Cesario for her own safety. While she searches for her lost twin brother, Sebastian, she falls in love with Orsino, the Duke she serves. Meanwhile, the Duke's beloved, Olivia, falls for Viola, believing her to be a man. Only Sebastian's arrival can solve the plot snarls and let love triumph. Free.

and parody songs in the 1950s and '60s has earned him a permanent place in American offbeat culture. In this cabaret-style show, an ensemble cast of vocalists perform some of Lehrer's riotously rude tunes, such as "Poisoning Pigeons in the Park," "The Vatican Rag" and the pro-pornography anthem "Smut." \$15, \$12 seniors and students; call 617-470-5329.

Comedy Connection

Mon.-Wed. at 8 p.m.; Thurs. 8:30 p.m.; Fri. and Sat. 8 p.m.; 10:15 p.m.; Sun. 7 p.m. The oldest comedy club in Boston showcases big-name, national comedians on weekends and up-and-coming local talent during the week. At 245 Quincy Market Place, Faneuil Hall, Upper Rotunda, Boston. Admission \$10-\$8 (weekend prices vary). Call 248-9700 for more information and a complete schedule.

Blue Man Group

Charles Playhouse, 74 Warren Street, Boston, indefinitely. Curtain is at 8 p.m. on Wednesday and Thursday, at 7 and 10 p.m. on Friday and Saturday, and at 3 and 6 p.m. on Sunday. Tickets \$35 to \$45. Call 426-6912 for tickets and information on how to see the show for free by ushering.

Exhibits

Isabella Stewart Gardner Museum

280 The Fenway, Boston, (566-1401), Tues.-Sun. 11 a.m.-5 p.m. Admission \$10 (\$11 on weekends), \$7 for seniors, \$5 for students with ID (\$3 on Wed.), free for children under 18. The museum, built in the style of a 15th-century Venetian palace, houses more than 2,500 art objects, with emphasis on Italian Renaissance and 17th-century Dutch works. Among the highlights are works by Rembrandt, Botticelli, Raphael, Titian, and Whistler. Guided tours given Fridays at 2:30 p.m.

Museum of Fine Arts

465 Huntington Ave., Boston, (267-9300), Mon.-Tues., 10 a.m.-4:45 p.m.; Wed., 10 a.m.-9:45 p.m.; Thurs.-Fri., 10 a.m.-5 p.m.; Sat.-Sun., 10 a.m.-5:45 p.m. West Wing open Thurs.-Fri. until 9:45 p.m. Admission free with MIT ID, otherwise \$10, \$8 for students and seniors, children under 17 free; \$2 after 5 p.m. Thurs.-Fri., free

Wed. after 4 p.m.

Mon.-Fri.: introductory walks through all collections begin at 10:30 a.m. and 1:30 p.m.; "Asian, Egyptian, and Classical Walks" begin at 11:30 a.m.; "American Painting and Decorative Arts Walks" begin at 12:30 p.m.; "European Painting and Decorative Arts Walks" begin at 2:30 p.m.; Introductory tours are also offered Sat. at 11 a.m. and 1:30 p.m.

Permanent Gallery Installations: "Late Gothic Gallery," featuring a restored 15th-century stained glass window from Hampton Court, 14th- and 15th-century stone, alabaster, and polychrome wood sculptures from France and the Netherlands; "Mummy Mask Gallery," a newly renovated Egyptian gallery, features primitive masks dating from as far back as 2500 B.C.; "European Decorative Arts from 1950 to the Present"; "John Singer Sargent: Studies for MFA and Boston Public Library Murals."

Gallery lectures are free with museum admission.

Museum of Science

Science Park, Boston, (723-2500), Daily, 9 a.m.-5 p.m.; Fri., 9 a.m.-9 p.m.; Sat.-Sun., 9 a.m.-5 p.m. Admission free with MIT ID, otherwise \$9, \$7 for children 3-14 and seniors.

The Museum features the theater of electricity (with indoor thunder-and-lightning shows daily) and more than 600 hands-on exhibits. Ongoing: "Discovery Center"; "Investigate! A See-For-Yourself Exhibit"; "Science in the Park: Playing with Forces and Motion"; "Seeing Is Deceiving."

Ongoing: "Friday Night Stargazing," Fri., 8:30 p.m.; "Welcome to the Universe," daily; "Quest for Contact: Are We Alone?" daily. Admission to Omni, laser, and planetarium shows is \$7.50, \$5.50 for children and seniors.

Other

Feast Days in the North End

Through early September, in the North End: Most weekends during the summer in the North End, the Italian district of Boston, are dedicated to a different individual saint who is celebrated with food, drink, music and dancing in the streets from morning to

night. You need not be Roman Catholic to participate, however only Roman Catholics in a "state of grace" should receive the Eucharist during communion in mass. While you're there, be sure to check out Mike's Pastries (280 Hanover St.), a popular hangout and a great place to get desserts. For more information and a complete schedule, visit <www.northendweb.com>.

Jul. 15: St. Rocco. Procession Only.
Jul. 27-29: St. Joseph. Battery & Hanover Streets.

Film Series: New Beat Cinema from Japan

Through Jul. 12. At the Museum of Fine Arts, Boston, 02115. For tickets and more information, call 369-3770. Tickets are \$8, \$7 MFA members, seniors, students, unless otherwise noted.

Jul. 12 at 5:30 p.m.: Cure (Kyua, Dir. by Kiyoshi Kurosawa, Japan, 1998, 111 min.). Cure is an atmospheric police thriller with overtones of mind control. A detective tracking a series of identical murders realizes his suspect has powerful hypnotic powers. The unsettling ending builds a thought provoking epilogue to the film's central idea: in a society stripped of traditional guides such as religion, family, and politics, the charismatic can exert a powerful hold on the minds of those left unanchored.

Boston French Film Festival

Through Jul. 29. At the Museum of Fine Arts, Boston, 02115. For tickets and more information, call 369-3770. Tickets are \$8, \$7 MFA members, seniors, students, unless otherwise noted.

Jul. 12 at 8 p.m.: Festival Opening Night: Under the Sand (*Sous le sable*, dir. by Francois Ozon, 2000, 95 min.) The new prodigy of the French Cinema, Ozon wrote and directed *Sand* with a mastery of cinematic exposition that recalls Hitchcock and Kieslowski, Marie (Rampling) and Jean (Bruno Cremer), are a comfortable, middle-aged couple, satisfied with the daily rhythms of their lives together. On vacation in the Landes region of western France, Marie naps while Jean goes swimming. When she awakes, she cannot find him and must face the enigma of her husband's sudden disappearance. Note: reception following screening. Ticket price: \$15, \$12 for members, students, and seniors.



SANTE D'ORAZIO

Janet Jackson takes over the Fleet Center August 25th for her latest stadium tour celebrating her latest album, *All for You*. Known for on-stage dynamics from her last *Velvet Rope* tour, Janet will bring "nasty" to an all new level.



ROD SPICER

"I DON'T THINK THEY CAN HANDLE IT" Destiny's Child (above) are touring with teenagers 3LW, "Must be the" Nelly, Dream, and Eve. They all come to Boston on August 10th.

BE LESS PRODUCTIVE AT THE OFFICE.

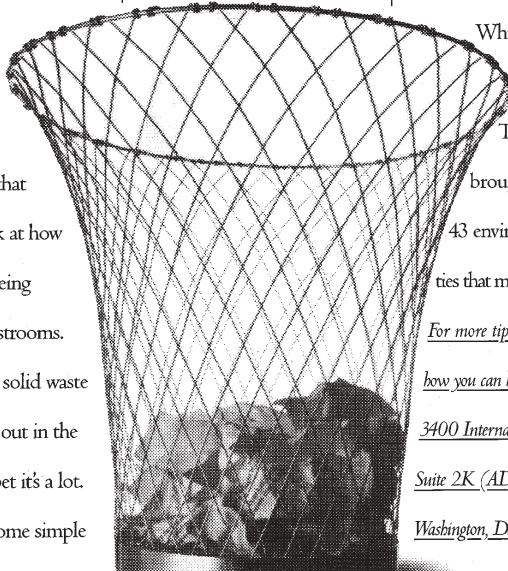
The office has always been a place to get ahead. Unfortunately, it's also a place where a lot of natural resources start to fall behind. Take a look around the next time you're at work. See how many lights are left on when people leave. See how much paper is being wasted. How much electricity is being used to run computers that are left on. Look at how much water is being wasted in the restrooms. And how much solid waste is being thrown out in the trash cans. We bet it's a lot. Now, here are some simple ways you can produce less waste at work. When you're at the copier, only make the copies you need. Use both sides of the paper when writing a memo. Turn off your light when you leave. Use a lower watt bulb in your lamps. Drink your coffee or tea out of mugs instead of throwaway cups. Set up a recycling bin for aluminum cans and one for bottles. And when you're in the bathroom brushing your teeth or washing your face, don't let the faucet run. Remember, if we use fewer resources today, we'll save more for tomorrow.



It takes 95% less energy to manufacture products from recycled materials.



Drink out of mugs instead of throwaway cups.



Which would truly be a job well done.

This message brought to you by the 43 environmental charities that make up Earth Share.

For more tips or information on how you can help, write Earth Share, 3400 International Drive NW, Suite 2K (AD3), Washington, D.C. 20008.



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IT'S A CONNECTED WORLD. DO YOUR SHARE.

This space donated by The Tech

ON THE SCREEN

— BY THE TECH ARTS STAFF —

The following movies are playing this weekend at local theaters. The Tech suggests using <<http://www.boston.com>> for a complete listing of times and locations.

- ★★★★ Excellent
- ★★★ Good
- ★★ Fair
- ★ Poor

Atlantis: The Lost Empire (★½)

The Disney formula progresses from moldy to rancid, albeit with new packaging. But all the PG rating excesses (mostly heightened levels of violence and interminable sequences of explosions and gunfire), along with a headache-inducing visual mess, cannot hide the inanity of the screenplay and the fact that this is a pre-marketed and pre-sold product instead of a movie. Michael J. Fox (as the voice of the lead character) and John Pomeroy (as his supervising animator) are alone responsible for the generous rating above. — Vladimir Zelevinsky

Blow (★★★)

Johnny Depp plays George Jung, the ambitious young capitalist responsible for creating the Colombian cocaine drug trade. Nick Cassavettes's and David McKenna's script seems to overly sympathize with Jung and omits the ruthlessness commonly associated with cocaine trafficking. However, director Ted Demme's biopic does rise above its own shortcomings. With a great lead turned in by Depp and a wonderful supporting role from Ray Liotta, *Blow* does deliver and is one of the better films available in current release. — Joseph Graham

Driven (★★)

Director Renny Harlin mixes stock footage, choreographed stunt driving, and computer-generated effects with very impressive results. Unfortunately, Sylvester Stallone's screenplay lacks any kind of convincing human drama. *Driven* provides plenty of action while the story and characters take a back seat. — JG

Kiss of the Dragon (★★)

Kiss of the Dragon, if watched in the spirit of "let's see Jet Li kick ass and laugh at this movie's sad attempts to be dramatic," is not a

bad movie. But for anyone interested in character development or a plot without holes as big as a slice of swiss cheese *Kiss of the Dragon* is a waste of time. — Pey-Hua Hwang

Memento (★★★½)

Christopher Nolan's *Memento* is a puzzle box of a movie, breaking up its narrative and shifting it in time, and is superbly successful in putting the audience in the same frame of mind as the ticking bomb of a protagonist, who is pursuing a criminal while suffering from memory loss. Top-notch suspense, dark comedy, and abundance of meaning make this a movie to be remembered. About half of the cast of *The Matrix* appears in colorful supporting parts. —VZ

Moulin Rouge (★★★)

Shakespeare in Love meets *La Boheme* — the film includes the dizzyingly fast-paced editing of an MTV music video, the garish glamour of *Strictly Ballroom*, the melodrama of Bollywood, the society of *La Traviata*, and the stark colors of Toulouse-Lautrec's painting. Despite a familiar story and familiar scenes, great acting (and singing) by Nicole Kidman and Ewan McGregor as the lovers, combined with Luhrmann's characteristically over-the-top direction, make the movie entertaining and worth seeing — and sometimes even moving. — Fred Choi

The Mummy Returns (★★½)

A bigger film than the first on the scale of action sequences and digital special effects (which make for a truly spectacular final half-hour), but less funny — and thus less enjoyable. Brendan Fraser still uses his great comic timing, but the plot is just a sequence of unnecessarily slow-moving plot

devices involving overly elaborate and exotic deaths. — VZ

Pearl Harbor (★★½)

One of the most expensive productions ever, *Pearl Harbor* may not however be a great artistic movie, despite its astonishing visual scenes. Although the recreation of the WWII beginning is vivid, the story line is unnatural and the romance featured is almost artificial. The characters are underdeveloped and unconvincingly acted, while the plot sometimes lacks. Nevertheless, the central scene featuring the Japanese attack at Pearl Harbor, with its vast array of impressive special effects, may be enough reason to eventually go and see this movie. — Bogdan Fedeles

Tomb Raider (½★)

Closely inspired by the homonymous videogames series, *Tomb Raider* is a pathetic movie that features no art whatsoever. The characters are sketchy and emotionless; the plot, childish and completely predictable. The special

effects are overly abundant and without them, there would be nothing left of this production. Don't waste your time with this. — BF

Swordfish (★½)

A father and paroled hacker (Hugh Jackman) strikes a dangerous deal with a mysterious, obsessed terrorist (John Travolta) and finds himself involved in a violent conspiracy. Halle Berry porn stars — er... co-stars; Dominic Sena (*Gone In Sixty Seconds*) directs this nonsensical, Swiss-cheese action flick. — Sandra Chung

You Can Count On Me (★★★½)

Winner of the 2000 Cannes Grand Jury Prize, this is a poignant film about a sister and a brother. Offering provocative writing, sincere acting, and engaging editing, this film treats you like a friend who's been inadvertently asked to sit in the living room as a family drama begins unfolding. The characters are real and their challenges tangible. — Erik Blankinship



Ben Affleck and Cuba Gooding Jr. star in the emotionally-enriched, plot-deprived *Pearl Harbor*.

CONCERT REVIEW

Lowell Punk Scene

Green Day, Living End Rock Tsongas Arena

By Sandra Chung
STAFF WRITER

*Green Day, Living End
Tsongas Arena
June 22, 2001*

Tsongas Arena in Lowell strayed from its standard folk and bluegrass shows for a night of moshing, plain and simple. Green Day, with opening act The Living End, rocked Lowell on Friday, June 22.

The Living End turned out to be a very energetic group and fun to watch. The most memorable thing about the performance was the bass player, who used a huge stand-up bass that was about as tall as he was, and stood on top of the thing to play it on a couple occasions. The set only lasted around a half hour, although the only familiar song was their radio hit "Prisoner of Society," which everyone sang along to.

The group's basic punk sound is uncannily like Green Day's. But when they launch into quasi-ska and rockabilly riffs, lead guitarist/vocalist Chris Cheney reminds me of Brian Setzer. And Scott Owens' stand-up is a classical double bass with an electric pickup on the bridge and an acoustic pickup on the fingerboard. Having played one a few times myself, I know that the strings on those things are fatter than my fingers. The way Owens rips into it (like a massive guitar, Stray Cat style) I wonder how he has any skin left on his fingers at all.

Drummer Travis Dempsey has more than enough of the requisite hyperactive, head-bopping skill. The Living End is currently in the process of touring exhaustively to recruit American and Canadian fans. Green Day is probably still the right ticket to ride.

Once Green Day arrived on stage, it became clear that they truly does own the stage. The horrible acoustics of Tsongas Arena are just the right platform for amplified punk rock. Hundreds of adolescent fans and at least three Tech staffers crowded onto the floor in a sweaty, jostling mass of Green Day-worshipping flesh. Hundreds more yelled and soaked up the music

from the arena seating.

Billy Joe Armstrong was born to work the crowd. He donned a crown for "King For a Day," pitted the people on the left against the people to the right, got the people in the seats to resent the people on the floor, and had everyone swear at him in unison. He bellowed "Yankees suck!" to an audience of Red Sox fans. He lead the crowd in "Hey-oh" and "1-2 ... 1-2-3-4" until we were annoyed and sick of counting our fingers, and then he did it some more. He introduced Mike Dirnt and Tre' Cool and guest musicians on trumpet, trombone, and saxophone.

Then he replaced the members of his band with volunteers pulled out of the audience. The audience musicians were 14 and 16 years old, and they picked up a few simple riffs so they could play all by themselves while Billy Joe sang. Cannons blanketed the crowd with Mylar and tissue paper confetti; band members sprayed us with water and jumped and kicked in the punk kung-fu style.

The set list was a bit of a disappointment. It was a greatest-hits collection: "Castaway," "Church On Sunday," "Longview," "Welcome to Paradise," "Hitchin' A Ride," "Brain Stew," "2000 Light Years Away," a cover of Operation Ivy's "Knowledge," "Basket Case," "She," "King For A Day," "Waiting," and "Minority." But the audience sang along and shoved and yelled anyway, until they finished "Minority" and left the stage.

Something washed over the crowd when Billy Joe returned to the stage to encore alone. Moshing ceased, pogoers stood still. There is nothing quite like Billy Joe singing "Good Riddance" to the strains of a lone guitar. It seemed like the last song, but the rest of the band returned and followed it up with "Warning," "Platypus," and "When I Come Around." The air had been crackling with rabid fan energy since the first strains of "Nice Guys Finish Last," and remained electric till long after the last notes of "Macy's Day Parade" ceased echoing in the arena.

FILM REVIEW ★★★

Princess and the Warrior

Naïve Princess, Dark Warrior Live Modern Fairy Tale

By Sandra Chung
STAFF WRITER

*Written and Directed by Tom Tykwer
Starring Franka Potente, Benno Fürman, and Joachim Król
Rated R
[German, with English subtitles]*

If you've ever seen a German film, you've probably seen *Run Lola Run*, the one about a woman with neon red hair running to deliver a load of deutschmarks to her boyfriend within 20 minutes to complete a shady deal and save his life. Star Franka Potente, director Tom Tykwer, and supporting actors Lars Rudolph and Joachim Król collaborate again in *The Princess and the Warrior*.

Sissi (Franka Potente) was born in a psychiatric ward and has never lived anywhere else. As a ward nurse, she devotes herself entirely to the care of her patients, especially Otto (Melchior Beslon), a blind idiot, and Steini (Rudolph), a wiry troublemaker. Bodo Reimer (Benno Fürman), an ex-soldier obsessed with the death of his wife, lives on the edge of society with his brother Walter (Joachim Król).

Sissi and Bodo cross paths when Bodo causes the accident that nearly kills Sissi. Bodo saves her life, then disappears with hardly a trace. Sissi is convinced they're destined to be together, and when she leaves the hospital, she tracks him down, only to meet a hostile dismissal. However, fate once again lends a hand in crashing Sissi's life into Bodo's, this time in a desperate run from the law. They must escape the police and battle the machinations of a jealous Steini to survive. But to stay with Sissi, Bodo faces a tougher battle within his own mind.

Writer/director Tom Tykwer's script contains the bare minimum of dialogue. Few actors deal with silence well enough that Hollywood doesn't have to supply audio and visual filler (e.g., Grammy award-winning songs and extra explosions). Potente and Für-

man deliver such nuanced, riveting performances that subtitles are almost unnecessary. Potente's puppet physicality—immobile upper body, sparse facial expression, hipless walk—perfectly complements her childlike character. Fürman's bottled-up rage and suffering boil over in Bodo's explosive dream sequences and burn in his expressive blue eyes (on which Tykwer wisely zooms in close). Not even the supporting actors waste so much as a twitch of a finger.

Princess boasts some of the best camera work I have ever seen. Some directors manage to pull off beautiful shots inevitably obscured by third-rate acting and mawkish orchestral swells. In *Princess*, the marvelous cinematography is unencumbered by the minimalist script and subtle soundtrack. Tykwer boldly pushes close enough to reveal the downy hair on Potente's upper lip and Beslon's crooked teeth. He flies the camera through an inverted loop to introduce Bodo's character in an unforgettable bridge scene, then fills out his past with seamless transitions and gritty violence.

Princess has no sex or frontal nudity and some minor violence. A few disturbingly graphic scenes warrant the R rating. The psychiatric patients have incredibly realistic breakdowns and tantrums that made all but a few audience members cringe. Be prepared to see Otto eat glass shards and Bodo perform an emergency tracheotomy with a knife and a soda straw.

Don't pay much attention to the subtitles. The translation misses some of the original connotations and the words aren't terribly important anyway. The actor's lines are from a bare-bones script; the depth of the story lies in the wealth of visible and intuitive information.

The Princess and the Warrior is an intense visual and emotional experience, best suited for modern art fans and hardcore romantics. In other words, it's an "artsy" movie. But if you're adventurous enough to try a non-Chinese, non-British foreign film, I highly recommend it.

FILM REVIEW ½★

Lara Croft: Tomb Raider

An entombment of art

By Bogdan Fedeles
STAFF WRITERDirected by Simon West
Written by John Zinman, Michael Werb,
Patrick Massett, and Michael Colleary
Starring Angelina Jolie, Jon Voight, Daniel
Craig, Iain Glen
PG-13

Although it has been called a movie, *Lara Croft: Tomb Raider* is very far from having anything to do with the art of cinematography. At best, this motion picture may be considered a random exercise of computer-generated special effects, or a very expensive advertisement for a computer game. From an artistic point of view, this movie is a total fiasco — one of the worst to hit the silver screen in the last few years.

Inspired by the video-game series, *Tomb Raider* features Lara Croft, a young British archaeologist on a dangerous mission. Given the success of the game series, the producers of the movie thought that they could make additional revenue by bringing the character to the screen. Any expectation of character development goes unfulfilled; the movie is just a replay of the video game with empty action sequences. Watch someone play *Tomb Raider*

or watch the movie — it's the same experience.

As you might expect, the story is pathetic. There is no twist, no tension, and almost no logic. Lara Croft incessantly fights the bad guys, and after a linear, totally predictable stream of events, wins the game in the end. Although at times the plot is reminiscent of the *Indiana Jones* franchise, *Tomb Raider* is so bad that no action sequence can be enjoyed. There is no comedy, no drama, and no emotion. It is just a video game.

Angelina Jolie's acting is almost nonexistent. Besides boasting her ample breasts, she conveys very little emotion and her character is as cold and emotionless as the video game character. Lara follows a pre-programmed path where she shoots all the monsters, robots, and bad guys for 90% of the movie. In the rest, she executes demanding stunts that are in fact useless re-creations of arcade game sequences. The extremely few scenes that show some trace of humanity of the character are sketchy and unconvincing.

Lara Croft's father is played by Jon Voight, but his part is so small that it almost goes unobserved. He is on screen for a mere two minutes. Again, there is nothing we can learn about the character, he is merely a voice that does not stand out in the context of the movie.

The negative characters are presented in the same manner: emotionless and unconvincing. We don't even hate them, because although they are Lara's foes, their lack of emotion makes us be indifferent. They are against Lara, so they are probably the bad guys. As in any stupid bedtime story, they want to conquer and rule the world, and Lara is going to stop them. Nothing interesting here.

The visual effects are the only highlights of the film. However, there are too many special effects, and after some time they get very annoying and uninteresting. All the non-human foes of Lara (stone monsters, six-handed giants, armored robots, etc.) are very accurate animations of their video-game counterparts. Their design is nice, and the animations are well-rendered, but because of their abundance, the movie feels more like a video game. As a result, *Tomb Raider* ceases to be a movie and is a complete waste of time.



ALEX BAILEY

Lara Croft (Angelina Jolie) stars in *Tomb Raider*.

RESTAURANT REVIEW

Raising the Marché Bar

Caveau: Something New Under the Pru

By Erika Brown & James Camp
STAFF PHOTOGRAPHERSCaveau Wine Bistro and Bar
Part of Marché Boston, Prudential Center
800 Boylston St., Suite 001
(617) 578-9700

Caveau Wine Bistro and Bar, the new kid on the Prudential Marché block, has really entered the market in a nice way, adding a table service option to the traditional eclectic buffet of Marché. The place actually looks like the dining room of a nice French chateau, complete with a warm fireplace, high vaulted ceiling, and artistic black-and-white photographs all over the walls. Also a nice addition were the long wooden tables and bench seating that made up most of the dining area.

The meal started off with a nice loaf of French bread, complete with a *boulangerie*-style paper bag. Though the bag was a bit gimmicky, the bread tasted fresh and had a pleasant rustic aroma to it. The menu is mostly seafood, running the gamut from \$7 shrimp cocktail appetizers to a \$25-per-person seafood extravaganza (two-person minimum). There is also an odd assortment of sandwiches, steaks, salads, and soups.

Caveau is reasonably priced for a wine bar, and with wines available by the glass, the sweet Vouvray white is a nice way to open an evening. Unfortunately, when we asked the first

waitress for a wine recommendation, she basically pointed to the menu and said that they were all good. We say "our first waitress" because one of the real oddities of Caveau is its tag-team waiting service. We had four different servers over the course of the evening, and were automatically charged a 12% gratuity.

The meal arrived fairly promptly, and the plates were nicely presented with just a subtle bit of artistry. No awards, but nice. The Prince Edward Island mussels were very tender, and the flavor was enhanced by a nice light cream sauce with carrot pieces.

The grilled Atlantic salmon scored high marks for freshness and flavor, but the mélange of beans and spices that topped the dish clashed with the fish. The beans' flavors better suited the salad. People must learn to leave seafood alone.

Though the desserts were almost unnecessary after the large portions, the cheesecake with strawberries was enjoyable, and the chocolate mousse cake was decadent — chocolate, chocolate, and more chocolate, with a lovely garnish of chocolate chips.

The tag-team waitstaff definitely left something to be desired at the end of the night. But all in all, Caveau has raised the Marché bar quite a bit with a friendly open atmosphere, well-chosen wine list, and a solid menu. The reasonable prices make Caveau friendly to college students and is worth a hop across the river.



JASON LAPENTA—THE TECH

Isabelle serves up some wine at the Prudential Building's Caveau.

MUSIC REVIEW

The Emotionally-Inclined, Invisible Man

Bright and Cheerful, Travis Carries on Britpop Tradition

By Sandra Chung
STAFF WRITER

There exists a vast contingent of American Britpop fans who aren't content with just the *Beatles Anthology*. They are the people who can't get enough of the acoustic, Dave Matthews Coldplay; the quirky, trendy Badly Drawn Boy; or the liquid, sometimes Foo Fighterish Doves. They clamor for obscure imported Portishead and Spacehog EPs and loudly lament the disbanding of Massive Attack and The Verve. I am one of them. I can't bloody well eat my porridge without my longtime staples and reigning British music royalty, The Cure and Radiohead. So I leapt onto the Travis bandwagon when *The Man Who*, which outsold even Radiohead in 1999, was busy spawning four hit singles and the band looked to be the next big thing in Britpop.

The key to Travis' appeal? Their music calls out to everyone's inner child. The band members are young, with a happy-go-lucky image and hairstyles that range from Donald Duck to Bart Simpson. Singer Fran Healy's lyrics, with tidy refrains, constant apostrophe, and guileless musings on love and life, combine with the band's glowing instrumental work for a deliciously mellow sound, reminiscent of Radiohead circa Pablo Honey. Nearly everything about Travis smacks of a softer, happier, more carefree

Radiohead.

If Radiohead's Thom Yorke's voice were a double espresso, Healy's would be a hot chocolate with whipped cream. Dido's would be a vanilla drowsy.

Their latest album, *The Invisible Band*, is coasting along on *The Man Who*'s momentum. If you're going to buy a Travis CD, you'd better start with *The Man Who*. Travis may be even hotter now than they were in the U.K. in 1999, but my feelings about *The Invisible Band* are lukewarm. My biggest beef with this edgeless album is that it threatens to play like a single hour-long song. They stray very little from the standard guitar pop sound and none of the instrumental work is particularly inspiring. You'll hear some windchimes, everyday percussion instruments, an organ, some strings, and some keyboard work, but generally they stick to an acoustic or tame electric guitar and unremarkable bass and drums. Producer and mixer Nigel Goodrich does a straightforward and astonishingly consistent job, which unfortunately makes the band sound excessively one-dimensional and monotonous.

"Sing," the first single, is a textbook example of what I call the Guitarist's Girlfriend Song. Healy wrote it to help his fiancée overcome her reluctance to sing in front of him. Repetition and rhyme are his key persuasive techniques. Healy sings the word "sing" 43 times and makes his point with this neat



COURTESY ARISTA

rhyme: "For the love you bring won't mean a thing unless you sing." Yes, that's a deftly plucked banjo in place of the rhythm guitar — my first reason why Travis should take over the underappreciated (read: nonexistent) Scottish country music niche.

About half the songs on the album are "happy" songs. "Follow the Light," "Side," "Pipe Dreams," and "Safe" reflect a self-assured, "Let it Be" attitude toward life. "Flowers in the Window" is such a blatant Beatles rip-off it should be considered a copyright violation. To spice things up a little, Travis also throws in some vaguely melancholy songs like the antisocial "Indefinitely,"

which aches to be reworked into a country single, and the bitter and homicidal yet still relaxing "Last Train."

The two bonus tracks, lumped together with "The Humpty Dumpty Love Song" in a monstrous 15-minute track, are the best on the album. "Ring Out the Bell" is a ballad from the point of view of — you guessed it — an angel without wings. The 6/8 meter makes me think he's sitting on a playground swing as he sings to himself. "I'm so lonely/God won't know me/I can hardly get up/I sold my halo." Healy's voice is the star on this one-take song; it has more raw, real energy than it does on the other tracks. The electric guitar contrasts well with light xylophone and snare work.

Travis' laid-back instrumental work meshes perfectly with the fun, ironic, old-school country sound of "You Don't Know What I'm Like." Healy is great on this one, too; he sings low and full with an accent like a twangy Michael Stipe (R.E.M.).

I have to give Travis a lot of credit for recording a remarkable number of consistently catchy and pleasant (though "Safe" and stuck in "The Cage") songs with "hit single" written all over them. Certainly, music does not have to be negative to be good. *The Invisible Band* is a lovely, solid album, and it's perfectly acceptable to swoon to Fran Healy's creamy voice. Secretly, I predict they will someday grow old and cynical and change their name to Travishead. But for now, the members of Travis are quite comfortable being their positive selves, and all their songs have that infectious Britpop quality that irresistibly tempts one to sing along. That's right, sing, sing, sing.

CONCERT REVIEW

Fuel Sweats to Success

The Band's Latest Concert Spree Through Massachusetts Doesn't Let Fans Down

By Pey-Hua Hwang
STAFF WRITER

Fuel, Jenifer Listen
Cape Cod Melody Tent
June 27, 2001

In between a Tuesday and Thursday show with Aerosmith, the band Fuel managed to squeeze in a one-night headliner in Hyan-nis. The big blue "Melody Tent" housed hundreds of cheering fans and high energy

rock as Fuel played to a sold out crowd. They played songs from both their newest CD, *Something Like Human*, and their previous hit, *Sunburn*. Many bands encounter the sophomore slump, but if there is such thing as a sophomore spike Fuel has achieved it. Many of the new songs are more lyrical but have lost none of the power or drive of the first album.

After the energy started to build with opening band, Jenifer Listen (who replaced

the original opening band, Saliva), the stage darkened, a thunderous drumroll ensued, and out strode Fuel. Clad in a red leather and black denim jacket and matching cowboy style jeans and boots, Brett Scallions, the lead singer, started up with the high energy "Ozone," throwing the crowd into a frenzy. When the song concluded all the band members were dripping with sweat, Scallions tossed his jacket backstage and called out, "Welcome to the Party! Ready to have some fun?"

They then launched into the similarly up-tempo "Mary Pretends," but then gave themselves a breather with the slightly more mellow but no less intense "Knives."

Next, they attacked "Bittersweet." Lead guitarist Carl Bell's fingers flew over the frets on his electric guitar and Scallions took out a guitar himself. Then it was time for "Shimmer," one of the band's hit singles. Here they milked the crowd for all it was worth. Scallions put his guitar away and threw his body into a crucifixion pose. He worked the crowd, used the microphone stand as a prop, and danced like a true "rock star." Then he commented on how it was nice playing for Aerosmith but it was even better "to see our

own f—kin' people."

After playing "Scar" they played the title track of their first album, "Sunburn." This piece really showed off Bell, as it began with a guitar riff and was more lyrical. Out came the lighters for "Innocent." This song was the first one where you got to really hear Bell's voice, which had a deeper timbre than Scallions's. The two traded off vocals while armed with guitars. This piece which was also more melodic and again featured Bell in a guitar solo.

Fuel then kicked the pace back up as Brett put away his guitar and put all his efforts into wielding the microphone for "Down." He spent a lot of time at the edge of the stage shaking hands with the fans. Bell's lyrical guitar solos were exchanged for ear piercing highnotes that indicated both skill and enthusiasm. With three more songs, they finished the show to an audience roaring for an encore.

Fuel would not disappoint. Out they came again, and kicked off the encore with the hit single "Bad Day." They followed up with a cover of Nirvana's "Breed," doing full justice to the posthumous band, and finally finished with their chart topper "Hemorrhage," which had the audience singing along with more energy than the rest of the concert. The band tossed out guitar picks and drum sticks.

Backstage with Fuel and "Fuelies"

A Fuel CD is amazing, but a Fuel concert is an experience not to be missed. After the concert there was an opportunity to talk to the band and some of their biggest fans backstage. The "Fuelies" had each been to approximately 15 Fuel concerts, knew all the band members on a first name basis, and even knew their favorite backstage foods.

The band members I was able to talk to were also quite personable. The lead singer was unavailable for comment, but bassist Jeff Abercrombie was quite happy to talk about how the band got together, and about growing up with lead guitarist Bell. Bell, who writes most of Fuel's songs, commented on success.

"It's like off the radar; you don't actually think it's possible," he said. As for the inspiration for his songs, he cited "life experience...livin' it."



MING-TAI HUH—THE TECH

Fuel front man Brett Scallions works up a sweat while rocking Cape Cod Melody Tent on June 27.

CONCERT REVIEW

Depeche Mode In Concert

Music for Molasses

By Erik Blankinship

STAFF WRITER

Depeche Mode Exciter Tour
Tweeter Center for the Performing Arts
July 1st

Depeche Mode sounded pretty avant-garde back in ninth grade. *Music for the Masses* was techno enough not to be mistaken for mainstream pop, and the British accents were strong enough to be cool. But some combination of the band's weak live performances, limited thematic range (biblical guilt, statutory lust, greed), and being older than fifteen ended my love affair with Depeche Mode.

I remember from high school the unwritten rule that you wear as much black as you can to a Depeche Mode concert. Of course, other requisite wear are Cure and Morrissey shirts. Low and behold, arriving at the July 1st show at the Tweeter Center were all of the expected costumes.

When I heard about the tour for their latest album *Exciter*, I was baffled — they're still around? Wasn't *Violator* the end of them? Oh yeah, there was *Ultra*, but who listened to that?

The show at the Tweeter Center began pretty strongly with some of their new tracks. Lead singer David Gahan has learned to do more than spin in circles. Now he shakes his ass at the audience — a lot — and runs around the stage with the microphone stand. It's as if someone let him in on the secret that he's a rock star, allowing him to perform as such.

But despite Gahan's stronger stage presence, the show wasn't at all personable. The audience received a mere "How are you doing Boston?" and a "Thank you Boston!" — despite the fact that the Tweeter Center is somewhere off of Interstate 95, closer to Providence than to Faneuil Hall. It was like listening to someone do *Mad Libs*. How about a little conversation with the crowd, David? Something a little more than just following the script?

But Depeche Mode can't do that. They did not even play instruments for most of the show. Sound effects, like the sampled breathing in "Personal Jesus," would just begin, and Gahan would just sing along. Guitarist Martin Gore would strum a chord repeatedly when

required. There was a drummer at the show — although it didn't look like he played every song. It seemed as though everyone was accompanying a cued tape.

Adding to the McConcert feeling of the show were cued films that played on a giant screen. The most ridiculous sequence was a goldfish swimming alone, and with the accompaniment of a heavy bass chord, a giant

shark entered the screen as well. Ooh, thematic! Swim away little virgin goldfish!

Martin Gore did do a small acoustic guitar set of some country-sounding songs. No one seemed to know what they were, but they were nice. It was especially nice to know where the music was coming from.

But my heart has not entirely hardened. I admit it — the twinkling instrumentation of "Waiting For The Night" struck a sentimental side. Some of the fun was just knowing how the songs would sound, even down to synthesized voice echoes.

"Clean" was also fun to hear again, especially with Gahan's low, groveling voice. Songs like "Halo" had Gahan reminding us that we all wear guilt like shackles on our feet.

Once upon a high-school eve, Depeche Mode's lyrics did seem to hold some importance, but seeing the old guy up there spewing out the same agonized words was just silly this time around. Especially when Gahan seemed to be having so much fun. "I Feel You Walking In My Shoes" had the same sense of hollow importance. At one point Gahan actually picked up the microphone stand and used it as a phallic extension.

Still, the show was entertaining. Every mid-twenties geezer should go see a "best of Depeche Mode" show, if only to find that you still know nearly all of the lyrics to "Enjoy The Silence" and "Black Celebration." You might even get a chance, since Gahan ended with a "see you next time ... Boston!"



NATHAN COLLINS—THE TECH

David Gahan (above) joined fellow band members Andy Fletcher and Martin Gore July 1 at Tweeter Center in Mansfield for a night of Depeche Mode favorites old and new.

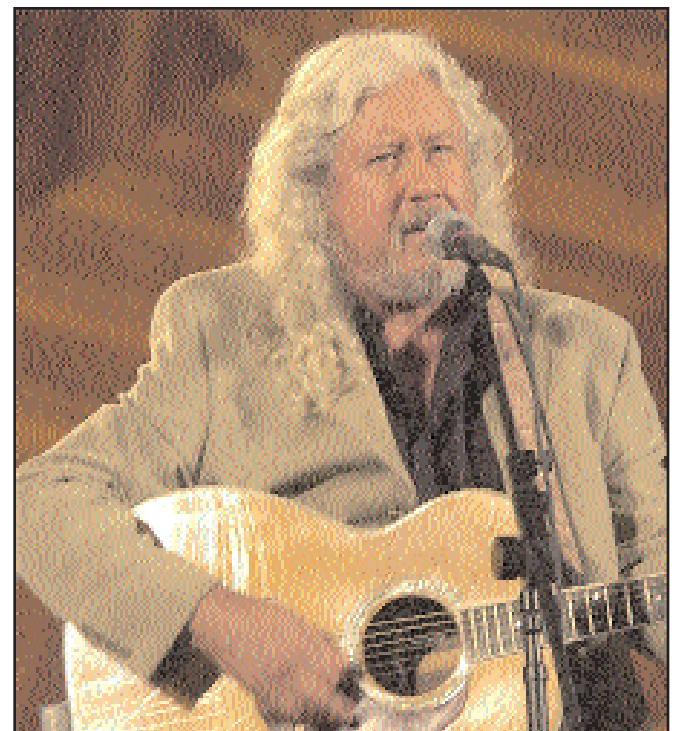


Revelers on both sides of the Charles River were witness to spectacular fireworks July 4; those watching from the Edward Hatch Memorial Shell on the Esplanade were also treated to a concert featuring Arlo Guthrie (middle right), Cyndi Lauper (bottom left), and a fair amount of exuberant flag-waving.

—MATTHEW T. YOURST



—JASON LAPENTA



—JASON LAPENTA



—JASON LAPENTA



—JASON LAPENTA

FILM REVIEW

Kiss of the Dragon

Kiss Believability Goodbye

By Pey-Hua Hwang

STAFF WRITER

Directed by Chris Nahon

Written by Jet Li and Luc Besson

Starring Jet Li, Bridget Fonda, Tcheky Karyo, and Max Ryan

Rated R

Kiss of the Dragon is a highly contrived, entirely action sequence-driven, summer action movie. Generally speaking, there is a certain suspension of disbelief when one goes to see a movie, but *Kiss of the Dragon* can't seem to decide between just maintaining a completely over-the-top plot or the reality of a drama leaving the viewer merely laughing at the inconsistency.

This film finds Johnny (Jet Li), a Chinese intelligence officer in Paris, as he is supposedly going to help in a drug bust but ends up being framed for two murders by the crooked head of the French Police force Jean-Pierre Richard (Tcheky Karyo).

The murder has only one witness, Jessica (Bridget Fonda), an "ex-junkie hooker" whose daughter is being held hostage by Richard. Not surprisingly, Jessica and Johnny end up teaming up to take Richard down.

However, the motivations and character dynamics are never clearly resolved in *Kiss of the Dragon*. Richard never seems to have a motive for his malevolence. There are also plenty of loose ends: for example, at one

point, Johnny goes to find the "emergency phone" as he is playing fugitive from the French police. At this point, he also stumbles upon a large stash of automatic firearms which are employed in quelling some security guards but are thereafter never again noted.

Yet, even with a threadbare plot, when Li is fighting, the film almost does justice to his martial arts skill. Fast, brutal, and at times comical, Li finds ways to use steam irons, a red billiard ball, chopsticks, and various blunt objects that Richard's thugs attack him with. Single-handedly disarming, dislocating, and occasionally dismembering his opponents, Li's character is the one redeeming feature of this movie. His final face-off with Richard, though it explains the movie's title, is almost anti-climatic after seeing the fight scene before.

As far as acting, Max Ryan manages to steal a scene as the sleazy Lupo, Jessica's pimp, who cares nothing for flesh but much

for profit. He stands out as the only character whose motives are clear.

Much more could have been done with Tcheky Karyo's super villain who always gets away clean. For the part he is given, though, Karyo pulls off the part of smooth diplomat when speaking to government officials, sympathetic friend when speaking to Jessica's daughter, and mob leader as he orders his goons about with polish.

Fonda, as the girl who just turned down the wrong path, keeps her part marginally believable.

Kiss of the Dragon, if watched in the spirit of "let's see Jet Li kick ass and laugh at this movie's sad attempts to be serious," is not a bad movie. For anyone interested in character development or a plot without enormous holes, *Kiss of the Dragon* is a waste of time.



P. CAMBOULIVE

Jet Li both writes and stars in *Kiss of the Dragon* — for now, he should stick with the acting.

SHORT TAKES

Keys to Success

By Huanne Thomas

STAFF WRITER

The album *Songs in A Minor* is every bit as vibrant as the 20-year-old New York native who penned it. Yet it is only a hint of the eclectic cornucopia of her talents still to come.

Alicia Keys demands your attention with her jazzy ballads and breathy-yet-powerful voice, often reminiscent of so many popular gospel greats. This freshman effort is a collection of tunes she composed and produced, mostly by herself, while in high school.

Some might be tempted to place her in the same bucket with other recent R&B divas like Erykah Badu, India Arie, and Jill Scott. But don't box her in just yet. Alicia's youth and breadth of talent brings something fresh and exciting that other artists haven't touched yet. And she is just getting started.

"Fallin'" is her first track to hit the radio waves, and it has topped R&B and pop charts alike. She manages to transport the listener to a smoky New York jazz club as she tells a familiar story of a young woman uncontrollably in love. She shows off the stunning range of her voice with poignant high-notes that add to complex rhythms. "Fallin'" has full harmonies that keep you swaying while you enjoy the sincerity in her voice.

In every track, Alicia drops subtle hints of her classically-trained voice among hip-hop threads. In "Girlfriend," we get that street symphony mixture of Alicia's jazz with Jermaine Dupri's rap skills. The keyboard patterns draw you in and the catchy lyrics keep you there. And the keyboardist consistently adding the danceable melodies is none other than Alicia herself.

Final recommendation: definitely get the album. Let her voice accompany you on a rainy weekend afternoon. And a year or two from now when a more experienced, mature Alicia drops an earth-shattering album, you will honestly say you saw it coming.

Shangri-La Di Da

By Freddy Funes

The Stone Temple Pilots' latest release is *Shangri-La Dee Da*. If you are expecting anything revolutionary or stunning, then you will be disappointed. If you are expecting "Wicked Garden" or "Plush," you will be disappointed again. You will not find much hard rock on *Shangri-La Dee Da*; rather, you will find melodic and slow songs.

The first four songs that start the album are great rock songs that are reminiscent of the Stone Temple Pilots' brilliance. The bass and guitar sounds on "Dumb Love" are crisp and elegant, while "Days of the Week" is incredibly catchy. "Hollywood Bitch" is probably the best track on the album.

Singer Scott Weiland adjusts his voice perfectly to the changing music, and his I-don't-give-a-hoot attitude that saturated the other Stone Temple Pilots albums appears in this song. Unfortunately, it is one of a few songs with that attitude.

The fifth track, "Wonderful," is where the Stone Temple Pilots' new style first emerges. An incredibly slow song, "Wonderful" has a decent melody, but Weiland's voice is improperly used. As a result, the track is awkward, especially after the more up-tempo "Hollywood Bitch."

Luckily, the album takes a turn for the better with "Regeneration." Weiland's voice magically flows through the song and the hard-hitting rock sound is amazing. "Transmissions from a Long Room" shows the greatness of the Stone Temple Pilots' musical talent. The bass and guitar playing are superb.

Shangri-La Dee Da is an honorable attempt to redirect the Stone Temple Pilots' musical talent and compose an entirely new sound. However, *Shangri-La Dee Da* is plagued with mediocrity and lacks flow and direction. With their latest endeavor, the Stone Temple Pilots attempt to take us through a spiritual journey; they attempt to show us that they have matured musically. They no longer need to spellbind listeners with their grunge, or so they want us to believe.

Breakfast Again

By Sandra Chung

STAFF WRITER

Remember "Breakfast at Tiffany's," the ubiquitous song about the irresistible Audrey Hepburn flick being the only common thread between a troubled couple? Even way back in 1996, when the tune was no. 3 on the U.S. charts and in the top five everywhere else, many more people could sing the chorus than could name the band. It didn't help that Deep Blue Something essentially dropped out of sight for the next few years.

Recently the Texas band re-emerged onto the music scene with a self-titled album and a new label, Aezra Records. Brothers Todd and Toby Pipes take turns on lead vocals, which have either a young John Lennon or Jon Bon Jovi character, depending on which brother is singing. Todd plays bass, while Toby and Kirk Tatom share guitar duty and John Kirtland mans the drums.

"She Is," the first single off the CD, nails the pop/rock hit formula. The track features an electric guitar/drum base in the style of Weezer, complete with stylish guitar solo. Pipes' pipes lean toward the Bon Jovi end of the spectrum as he sings about jealousy in his relationship with a girl he puts on a pedestal: "She



is everything that I believe in/Can't you see that she and me/Are the way things should be?"

"So Precious" is a distinctly indie mix between rock and Latin dance music, with its jaded, Cake-like vocals, tropical drum set and horn complement. Deep Blue Something continues to show off its versatility with songs varying in character from the acoustic, orchestrated "Enough to Get By" to "Who Wants It," which walks the line between rock and metal. Some pieces start in one genre and end in another, or mix eclectic choices such as Vapors and Metallica.

"Breakfast at Tiffany's" was a departure from the distinctly alternative album *Home*. The new album strays closer to mainstream pop without losing the band's roots. *Deep*

Blue Something starts with a solid rock guitar base and adds the indie rock touch with intelligent lyrics, nimble electronic work, and excellent artistic choice in guest instruments and percussion. Though it would be tough for any single to top the success of "Breakfast at Tiffany's," *Deep Blue Something* has enough intelligent and talent behind its generally well-crafted songs to help put the band back on the charts.

Trance-Inducer

By Joseph Graham

STAFF WRITER

Containing some of the most creative and disturbed interludes ever recorded, *Lateralus* is 70 minutes of brutally aggressive, clear, tight, and at times trance-inducing, progressive metal. Although the album lacks most of the sardonic and contemptuous lyrical styling fans may be used to hearing from front man Maynard Keenan, *Lateralus* still contains haunting vocals, calming musical lulls, and violent distorted guitar busts that fans enjoy.

One of the disc's highlights comes near the end with a 10-minute piece that is unexpected and soothing. With its Eastern influences, "Reflection" feels like the calm after the storm. Although the track sounds a bit out of place (strange to say that something actually sounds out of place on a Tool album but it's true), drummer Danny Carey truly steals this number. His skill is also evident in *Lateralus*'s second single, "Ticks & Leeches."

As the disc changes tracks, so does the attention and focus of the music. Each member seems to have their say, which is evident in the instrumental tracks "Eon Blue Apocalypse," "Mantra," and "Triad." While the first single from the disc "Schism" rings clear as a total group effort and is arguably their most polished effort to date, the more experimental tracks show that the band is always progressing and taking musical chances.

All in all, Tool's new album will not disappoint. *Lateralus* blends the visceral power of their earlier recordings with experimental tracks. Tool triumphs again with a combination of dense and loud artistry over anger. With most of the tracks reaching epic lengths, it is clear that Maynard and company may not score the widespread commercial appeal that most bands covet, but this seems to never have been their intention in the first place.



July
11, 2001

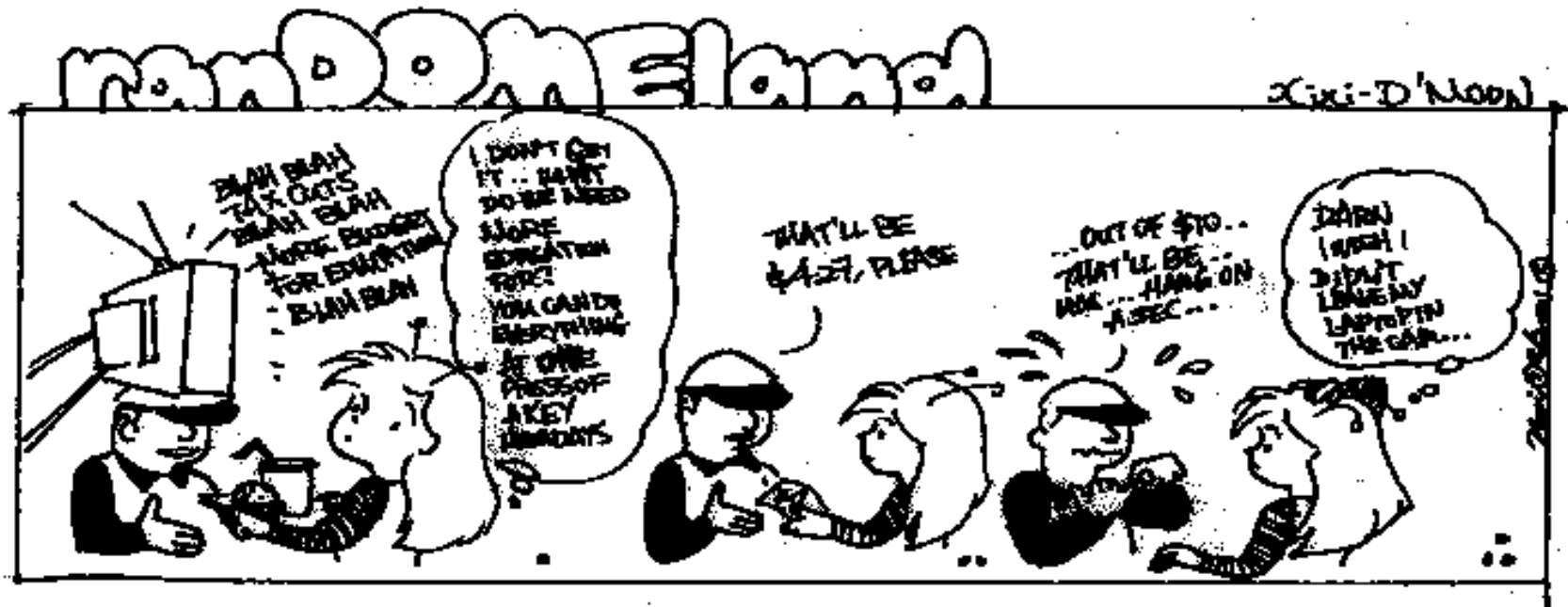
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by Bill Amend

FoxTrot

by Bill Amend

Dilbert® by Scott Adams

Dilbert® by Scott Adams

TechCalendar

TechCalendar appears in each issue of *The Tech* and features events for members of the MIT community. *The Tech* makes no guarantees as to the accuracy of this information, and *The Tech* shall not be held liable for any losses, including, but not limited to, damages resulting from attendance of an event. Contact information for all events is available from the TechCalendar web page.

Visit and add events to TechCalendar online at <http://tech-calendar.mit.edu>

Wednesday, July 11

12:00 p.m. - 1:00 p.m. – **Eudora Quick Start**. This session shows how to configure Eudora, create messages and address lists, send and receive attachments, and sort incoming e-mail. free. Room: N42 Demo Center. Sponsor: Information Systems.
 2:00 p.m. - 6:00 p.m. – **Blood Drive**. free. Room: La Sala (Student Center 2nd Floor). Sponsor: American Red Cross Team and Network, Blood Drives.
 12:10 p.m. - 1:00 p.m. – **"Mixing and Circulation in the Deep Brazil Basin"**. free. Room: 54-915. Sponsor: Physical Oceanography.
 3:00 p.m. - 5:00 p.m. – **spouses&partners@mit-Summer Meetings**. Join us for conversation on the steps of the Student Center during the summer months. free. Room: Steps outside of Student Center. Sponsor: spouses&partners@mit, MIT Medical.
 6:00 p.m. - 8:00 p.m. – **Rollerhockey**. Pickup rollerhockey. See the URL for directions and more information.. free. Room: Kennedy Elementary School, Cambridge. Sponsor: Pickup Rollerhockey Group.
 7:30 p.m. - 9:30 p.m. – **Renaissance Dancing**. There are many forms of Renaissance Dancing that we practice. From Italian balli to courtly pavans to English country. We dance them all with flair and fun. Dress is common street clothing. No experience necessary; instruction is provided. free. Room: 31-161. Sponsor: Society for Creative Anachronism.

Thursday, July 12

12:00 p.m. - 1:00 p.m. – **Web at MIT Quick Start**. Learn how to explore the Web using Netscape, and get an introduction to the Web at MIT. free. Room: N42 Demo Center. Sponsor: Information Systems.
 12:00 p.m. - 6:00 p.m. **Blood Drive**. free. Room: La Sala (Student Center 2nd Floor). Sponsor: American Red Cross Team and Network, Blood Drives.
 6:00 p.m. - 8:00 p.m. **Rollerhockey**. Pickup rollerhockey. See the URL for directions and more information.. free. Room: Kennedy Elementary School, Cambridge. Sponsor: Pickup Rollerhockey Group.

Friday, July 13

12:00 p.m. - 1:00 p.m. **FileMaker Pro Quick Start**. This session introduces database terms, shows how to create a simple database, and covers the six modes of FileMaker Pro. free. Room: N42 Demo Center. Sponsor: Information Systems.

Sunday, July 15

9:00 a.m. - 2:00 p.m. **MIT Swapfest**. Buy/Sell/Swap All Things High Tech. \$5. Room: Albany St. Garage. Sponsor: MIT Radio Society.

Monday, July 16

12:00 p.m. - 1:00 p.m. **PowerPoint Quick Start**. PowerPoint makes it easy to jazz up your presentations. Get an introduction to what PowerPoint can do. Find out how to create shows. Learn how to use drawing tools, graphics, and create handouts. free. Room: N42 Demo Center. Sponsor: Information Systems.
 6:00 p.m. - 8:00 p.m. **Rollerhockey**. Pickup rollerhockey. See the URL for directions and more information.. free. Room: Kennedy Elementary School, Cambridge. Sponsor: Pickup Rollerhockey Group.
 7:00 p.m. - 10:00 p.m. **MIT Summer Philharmonic Orchestra Rehearsals**. George Ogata '92, founder, music director and conductor. Membership by audition only. Concert on Aug. 4 of Tchaikovsky's Capriccio Italien, Rimsky-Korsakov's Capriccio Espagnol, and Tchaikovsky's Symphony No. 4 in F minor. George Ogata is on the faculty of the Longy School of Music in Cambridge where he is conductor of the Young Performers Chamber Orchestra, a senior youth orchestra program of the Preparatory Division. Last summer, the MIT Summer Philharmonic Orchestra received a standing ovation for our most memorable performance of Mahler's Symphony No. 9. free. Room: Kresge Auditorium. Sponsor: MIT Summer Philharmonic Orchestra.
 7:00 p.m. - 8:30 p.m. **Ballroom Dance Workshop**. Beginner Ballroom Dance Workshops. \$1 for members, \$2 for non-members. Room: visit our website at <http://web.mit.edu/bdclub> for schedule and location. Sponsor: Ballroom Dance Club.

Tuesday, July 17

11:00 a.m. - 3:00 p.m. **Learn Chado - The Way of Tea**. No class on July 3, 10, or 17. Classes

will resume on July 24. Experience over 400 years of history and culture at a Japanese tea ceremony. Mrs. Kyoko Wada will share the "happiness of the tea ceremony" with you. Drop in anytime between 11 a.m. - 3 p.m.. \$3 for students, \$5 for others. Room: McCormick Hall. Sponsor: spouses&partners@mit, MIT Women's League.
 12:00 p.m. - 1:00 p.m. **Excel Quick Start**. This course presents an overview of Excel's basic functions, as well as some of its more powerful features and capabilities. free. Room: N42 Demo Center. Sponsor: Information Systems.

Wednesday, July 18

12:00 p.m. - 1:00 p.m. **Element K Hands-On Workshop**. Is web-based training for me? Spend an hour in an instructor-led workshop. Learn how to get started using web-based training, explore what is offered and ask questions. For more information, go to: <http://web.mit.edu/is/training/wbt>. free. Room: W89-125. Sponsor: Information Systems.
 12:10 p.m. - 1:00 p.m. **"Mixing and Circulation in the Deep Brazil Basin"**. free. Room: 54-915. Sponsor: Physical Oceanography.
 4:30 p.m. **Interactive Machine Art** Kal Spelletich, Artistic Director of SEEMEN, will describe and demonstrate participative robotic art. free. Room: Bartos Theater. Sponsor: Media Lab.
 6:00 p.m. - 8:00 p.m. **Rollerhockey**. Pickup rollerhockey. See the URL for directions and more information. free. Room: Kennedy Elementary School, Cambridge. Sponsor: Pickup Rollerhockey Group.
 7:30 p.m. - 9:30 p.m. **Renaissance Dancing**. There are many forms of Renaissance Dancing that we practice. From Italian balli to courtly pavans to English country. We dance them all with flair and fun. Dress is common street clothing. No experience necessary; instruction is provided. free. Room: 31-161. Sponsor: Society for Creative Anachronism.

Thursday, July 19

12:00 p.m. - 1:00 p.m. **WINPartners User Group**. (Recently renamed from NT Partners) WINPartners is a group of Windows NT workstation users and administrators who have banded together to support each other in the use of Windows NT. NT Partners share their NT experiences, ask and answer questions, solve problems, discuss hot topics, and warn each other of pitfalls. Any NT user at any level of expertise and experience is welcome to join the group and attend meetings. free. Room: N42 Demo Center. Sponsor: Information Systems.
 6:00 p.m. - 8:00 p.m. **Rollerhockey**. Pickup rollerhockey. See the URL for directions and more information.. free. Room: Kennedy Elementary School, Cambridge. Sponsor: Pickup Rollerhockey Group.

Friday, July 20

12:00 p.m. - 1:30 p.m. **Orientation to Computing at MIT**. This seminar provides basic, non-technical information about the MIT computing environment. Topics include: telephones and voice mail operating systems supported software and recommended hardware the campus network security computer-related health issues. free. Room: N42 Demo Center. Sponsor: Information Systems.

Monday, July 23

12:00 p.m. - 1:00 p.m. **Mac Tech Partners User Group**. free. Room: N42 Demo Center. Sponsor: Information Systems.
 6:00 p.m. - 8:00 p.m. **Rollerhockey**. Pickup rollerhockey. See the URL for directions and more information.. free. Room: Kennedy Elementary School, Cambridge. Sponsor: Pickup Rollerhockey Group.
 7:00 p.m. - 10:00 p.m. **MIT Summer Philharmonic Orchestra Rehearsals**. George Ogata '92, founder, music director and conductor. Membership by audition only. Concert on Aug 4 of Tchaikovsky's Capriccio Italien, Rimsky-Korsakov's Capriccio Espagnol, and Tchaikovsky's Symphony No. 4 in F minor. George Ogata is on the faculty of the Longy School of Music in Cambridge where he is conductor of the Young Performers Chamber Orchestra, a senior youth orchestra program of the Preparatory Division. Last summer, the MIT Summer Philharmonic Orchestra received a standing ovation for our most memorable performance of Mahler's Symphony No. 9. free. Room: Kresge Auditorium. Sponsor: MIT Summer Philharmonic Orchestra.
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SCIENCE & TECHNOLOGY

PROFILE

Bob Langer: Quest of Curiosity

700 Papers ... 13 Books ... 80 Academic Honors ... One Man

By James Camp

CONTRIBUTING EDITOR

Robert Langer is one of those rare people who seems to do exactly what he wants to.

His lab is dubbed the "Langer Corporation" for its success in the fledgling biotech industry. He tackles problems ranging from finding new ways to deliver drugs and biomolecules to building tissues in the lab, and his research staff comes from such diverse fields as solid state physics, clinical medicine, and chemical engineering. According to Langer, "whatever it takes to solve the problem, that's what we'll do."

And solve problems he has. Langer holds around 380 patents, licensed to almost 80 companies. He estimates 30 products, either on the market or in the FDA-approval pipeline, have come from technologies developed in his lab.

Many of these products involve new types of biomaterials, beginning with porous plastic implants for drug release, and working their way into diverse fields such as DNA delivery for gene therapy (designing a polymer that acts like a virus), "intelligent" drug release (a silicon-chip system that releases precise quantities of drugs on pre-programmed schedules), and cellular systems (integrating cells with his new materials to build tissues or bioreactor systems). Along the way, Langer helped to invent the twin fields of controlled drug delivery and tissue engineering.

While best known for these highly marketable engineering successes, Langer insists on a commitment to academia as well. Langer began his academic life as a chemical engineering student at Cornell, then went on to do his doctoral research in the same field here at MIT. After doing postdoctoral work in a medical research lab at Harvard, Langer returned to MIT as a professor and has spent most of his career blurring the lines between engineering and medicine.

Langer sees himself as a dedicated undergraduate educator as well. Together with chemistry professor John Essigmann, he created the "Biotechnology and Engineering" course (5.22J/10.02J), and himself created and taught two Integrated Chemical Engineering (10.491) modules on drug delivery. His ratings don't let his reputation down either, with consistent student evaluations in the high 6s.

The Man and His Research

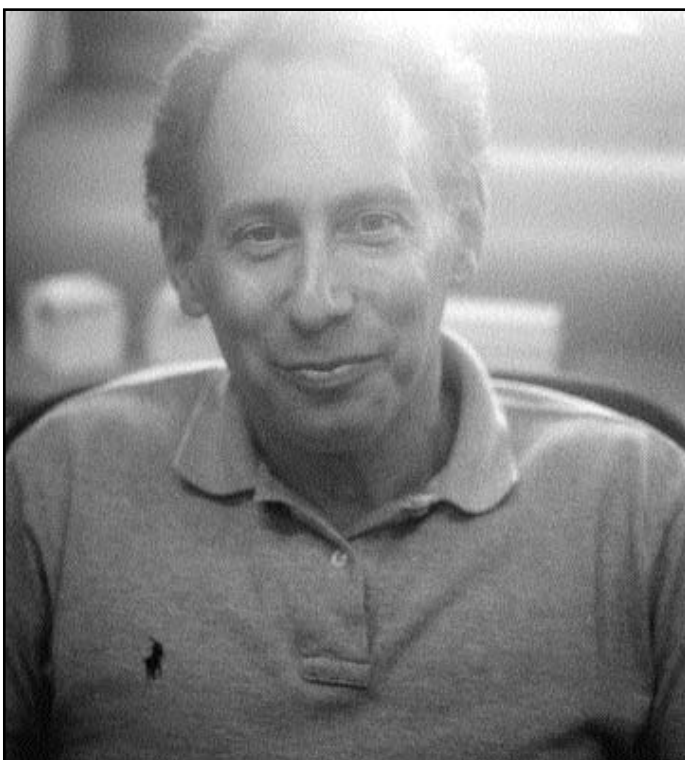
Three decades ago, before Langer began work on developing new materials, physicians would use any material on hand that would seem to fit the bill: mattress stuffing for breast implants and ladies' girdle fabric for artificial hearts were two of the more ridiculous examples. Langer's first major insight was that materials science and polymer chemistry could be used to design materials suited exactly to the purpose at hand: "We ask the question, what do you want in a biomaterial?"

The first application was to build polymers that would allow controlled release of "essentially anything" in a biological environment.

But according to Langer, poly-

mers "just happened." He was working with Dr. Judah Folkman at Harvard on trying to find a new way to stop blood vessels from growing (angiogenesis) in a tumor and hit upon the idea of using a porous plastic to release anti-angiogenic factors. This idea has led to a variety of products both inside the Langer group and in the medical world at large, from anti-cancer brain chemotherapy wafers (used to treat TV's Dr. Green on *ER*) to implant materials that secrete factors encouraging tissue regeneration.

Langer did not stop there, however. Together with Dr. Joseph Vacanti at Massachusetts General Hospital, Langer started working to combine living cells and biodegradable polymers in an effort to build tissues in the lab. These structures could then be implanted in a patient,



Professor Robert Langer's lab is called the "Langer Corporation." JAMES CAMP — THE TECH

and after the plastic backbone had dissolved away, what would remain would be living, functional tissue. Thus the new field of tissue engineering began to emerge; and today, scores of research labs and startup companies across the country are currently in a race to produce marketable tissue-engineered products.

Another recent Langer lab innovation, designed by researcher John Santini in collaboration with Professor Michael Cima, is a chip with microscopic wells containing measured doses of drugs, biomolecules, or even perfumes that can be released by applying very small currents. While initial experiments have used small numbers of wells and simple release patterns, Langer and his collaborators predict that these devices could someday be used to run complex drug-release programs that are difficult with pills and impossible with passive-release systems like porous plastics. They could even incorporate biosensors to respond to biological changes with different release patterns.

This kind of dreaming seems typical of Robert Langer. When asked where his research is going, he rattles off a list of possible projects. Intelligent drug delivery that would control both amount and location of a drug; noninvasive glucose testing using ultrasound; gene therapy by designing artificial viruses that deliver healthy genes to stem cells; control of cell diffusion in medical implants — and on and on.

He even mentions a possible collaboration with the Department of Earth and Planetary Sciences to control the weather. His only criterion for a project, he says, is that it be done in a reasonable amount of time and have a reasonable impact.

Life in Langer's Lab

Langer maintains an "open book policy" (just put your name in his appointment book and he will see you), a system which provides each of his students and researchers equal opportunity to reach him (and he answers his e-mail almost as promptly as undergrads).

Langer is a joint faculty member in three MIT graduate programs: Chemical Engineering (Course 10), Health Science and Technology (HST) and Bioengineering (BEH). Even so, Langer draws students from an even greater variety of departments, with ten different disciplines represented in his lab. When asked which of his three departments he feels most at home in, Langer responded "all of them."

"The role of a graduate student is to learn," he said, pointing out that the main difference between a graduate student and an undergraduate is that grad students have to learn to ask their own questions before they can go about answering them. "My goal for a graduate student is to make that transition," he said, noting that successful researchers are "able to ask important questions."

Langer wants his graduate students to enjoy research and to get exposed to different ideas, and thinks that his lab is an excellent environment for both purposes. He also believes that grad students should have the opportunity to train and supervise other students, and so he encourages them to take on undergraduate research assistants. The net result is a very functional laboratory that produces professors at top-notch engineering schools, engineers at biotechnology companies, and a good number of startup biotech firms.

Undergraduates in the Langer lab always report to a supervising grad student or postdoc, usually on a sub-project of their supervisor's research. Some work as many as three or four years in the lab and "hopefully get a paper or a patent out of it." Perhaps unusual for an MIT professor, Langer's open-book policy extends even to his undergraduate researchers. While he encourages them to discuss most issues with their supervising graduate student, he is willing to sit down and talk about research with just about anyone.

Perhaps the one drawback of the Langer lab is that its success has made it very popular. "We get a huge number of applicants," says Langer, citing around two thousand requests a year for graduate and postdoctoral research positions in his lab. With that kind of competition to get in, it's really no surprise that so much innovation happens in Langer's lab.

The great physicist Isidor Isaac Rabi once said that, "Science is a great game. It is inspiring and refreshing. The playing field is the universe itself."

In an effort to bring the MIT community news from the front lines of current research, as well as reports on the newest gadgets to hit the market, *The Tech* presents its new Science and Technology section.

The following pages contain stories on the people and ideas that expand humankind's understanding of the world as well as analyses of the figures and issues that shape it. From developments in the realm of particle physics to the pioneers of the biotechnology revolution, the section will cover the gamut of discoveries and innovations that the world's scientists think up.

In addition to spreading the news, the section will also offer a forum for discussion on the science policy issues that affect the nation as well as the planet as a whole. The current issue, for example, includes a perspective piece on the controversial energy policy put forward by the current presidential administration in Washington. Future pieces will discuss issues such as federal funding for stem cell research, the causes and impacts of global warming, as well as future of science education in schools across the country.

As we try to provide a Science and Technology section geared toward those with the literacy of "MIT Freshman," we grapple with the problem of writing for what probably is among the most scientifically diverse communities in existence.

Along the way, we hope to bring you lectures and interviews by people who spark our curiosity. In this endeavor, we welcome your comments, suggestions, and contributions.

PERSPECTIVE

Fossil Fuels Forever

By Leigh Outten

The problems have all moved to the forefront of an emerging public debate. Environmentally friendly drilling techniques? Soaring energy costs for the American family? Industrial productivity? California's absurd costs for pumping water?

They all seek resolution in President George W. Bush's energy policy, which takes the "we've got problems and they should be fixed" approach.

Bush's policy addresses our ever-increasing dependence on foreign fuel supplies. In suit with the "can-do" nature of the policy, Bush has come to the conclusion that we can deal with hemorrhaging foreign oil imports. As well, the probability of more drilling on our home turf seems dubious. One thing is clear — home turf drilling won't happen.

In the areas of electricity production, improved coal-burning technologies are promoted. This is reasonable in light of the fact that the policy identifies SO₂, NO_x, and mercury as major pollutants.

New technologies would result in reductions of those toxins, but have we left out CO₂? In order to promote fossil fuels, as this policy does, one must ignore the controversial CO₂. Of course, in my opinion, Americans have been ignoring it for years, but now it's officially on paper. Due to finite coal supplies and the reality of CO₂'s threat, coal is not the answer for the future, so why dwell on it?

The policy is also very encouraging of nuclear power. The recom-

mendations made involve promotion of nuclear power plant license renewal and increased generation at existing facilities. In eager anticipation of deregulation, the nuclear industry has become amazingly competitive in recent years.

The attention nuclear power receives in the policy is pleasing, but there's nothing new to it. Nuclear power has been holding its own for the past several years, and this policy recognizes that fact.

Bush's policy also addresses the issue of energy efficiency. The US has severely increased energy efficiency over the past several decades. I'm not seeing any new insights from the policy in this area, more of a restatement of our status and small promotions of energy-friendly equipment. After all, we live in a capitalist society — if energy efficiency saves money, then energy efficiency is what happens.

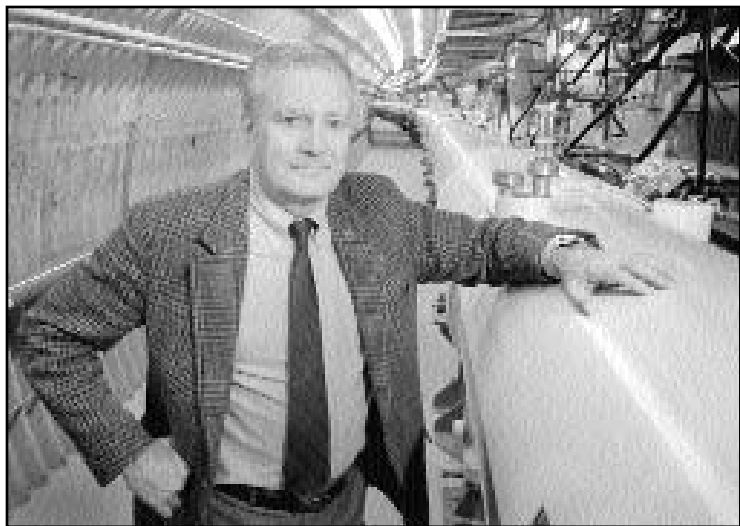
I cannot say I am overly pleased with this new president's policy, but then I cannot say I am overly unsatisfied. Realistically speaking, I think our energy policy is a true reflection of our times.

A promotion of coal use will only cause our finite coal supplies to dwindle even sooner and perhaps thrust us toward other electrical generation technologies. Perhaps increases in the use of fossil fuel will help us to face our CO₂ problem. We are certainly not ready for large changes in electrical generation, and this policy reflects that reality.

Leigh Outten is a graduate student in the School of Nuclear Engineering.

Some people come to MIT for Course 21.
For the rest of us, there's Science.

science@the-tech.mit.edu



COURTESY BROOKHAVEN NATIONAL LABS

Dr. John H. Marburger III, Bush's chosen Science Adviser, sits aside his prized Relativistic Heavy Ion Collider.

SCIENCE & TECHNOLOGY ROUNDUP

Bush Names Democrat Science Adviser

After months without leadership, the U.S. Office of Science and Technology Policy under President George W. Bush finally has its head, John H. Marburger III. His appointment as National Science Adviser comes at a time when the heated issues of environmental policy and stem cell research are in debate.

Science Briefs

The delay in choosing an adviser has been attributed to the lukewarm reception received by many in the scientific community to invitations by Bush. It is even rumored that MIT President Charles M. Vest was considered for the position.

Marburger, a physicist with degrees from Princeton and Stanford, carries on the tradition of having a physicist in the post since the days of Eisenhower. What sets Marburger aside from his predecessors is his unabashed disclosure of his political affiliation. Immediately after Bush's nomination, Marburger introduced himself as a lifelong Democrat.

The nomination now awaits confirmation by the Senate and a month-long background check, neither of which are expected to delay the appointment.

Marburger is an adamant supporter of nuclear energy, though his views on stem-cell research are as yet unknown.

What remains unclear is Marburger's relationship with the White House. The White House has indicated that the National Science Adviser's role with the President will be mediated through White House Chief of Staff Andrew Card. Though that situation isn't ideal for Marburger, he remains optimistic that his views will be heard.

Marburger, currently the Director of Brookhaven National Laboratory, achieved national prominence for his role in ameliorating Brookhaven's safety record and relations with the lab's neighbors. He also pioneered the effort to bring the Relativistic Heavy Ion Collider to Brookhaven.

-Devdoot Majumdar

Abnormalities In Stem Cell Clones

Scientists at the Whitehead Institute for Biomedical Research and the University of Hawaii have determined that cloned genes are often improperly expressed, even when using embryonic stem (ES) cells, leading to serious abnormalities later in life. The finding comes at a time when federal funding for stem cell research is being fiercely debated in Washington.

"These data imply," the scientists write in their paper, published in *Science*, "that even apparently normal cloned animals may have subtle abnormalities in gene expression."

According to the findings, there is no reason to believe that the genes themselves were altered in any way during the cloning process. Instead, they found, the manner in which the cloned genetic code was translated into proteins was both unstable and flawed.

The nuclei ES cells are favored for reproductive cloning over differentiated adult cells because it is thought that the egg can more readily bring ES cell nuclei to the correct developmental stage compatible with embryonic growth.

In an interview with Reuters, lead author David G. Humphreys G said, "Throughout pregnancy, you find if you use embryonic stem cells as nuclear donors that you have a higher percentage of mice at least making it to birth."

"It's also easy to imagine that using embryonic stem cells as donors might be easier to reprogram back to a state compatible with a fertilized egg."

-Shankar Mukherji

B Meson Found to Violate Charge-Parity Symmetry

A team of over 600 researchers from 75 institutions around the world has found a fundamental difference between the behavior of matter and antimatter. Working out of the United States Department of Energy's Stanford Linear Accelerator Center (SLAC), the scientists studied the subatomic particle known as the B meson and its corresponding anti-particle, the anti-B meson. In their series of experiments, the researchers observed that as the two particles decayed, more matter was left than antimatter. It has been theorized that such a phenomenon could explain the prevalence of matter in today's universe.

The phenomenon, known as charge-parity violation, has only been observed once before, when Dr. Val L. Fitch of Princeton University and Dr. James W. Cronin of the University of Chicago discovered it while studying the neutral K meson, or kaon. They later went on to share the 1980 Nobel Prize in physics for their work.

The B and anti-B mesons were generated by high-energy collisions of electrons and positrons, or anti-electrons, in the 1.3-mile particle accelerator in California. A 1200-ton detector, known as BABAR, recorded how the particles in question decayed.

According to the researchers, the magnitude of the CP-violation is generally in line with the Standard Model of particle physics, the general framework which is used to describe the fundamental constituents and forces in the universe.

Despite the new evidence, most theorists still believe that the degree of the CP-violation is not great enough to account for all the matter that inhabits today's universe.

- Shankar Mukherji

BOOK REVIEW

Engaging Economic Adventures

By Dan Bergstresser

STAFF WRITER

In almost any economics textbook, a reader will encounter the work of MIT Institute Professor and Nobel Laureate Franco Modigliani. Developing and testing powerful theories of personal saving behavior and corporate financial policy, Modigliani played a large role in moving economic science from ad-hoc models to firmer foundations. Equally striking is the enduring respect and affection that Modigliani has earned from colleagues and students. In *Adventures of an Economist*, Modigliani displays his considerable economic insight and shows the wit and compassion that have earned him the love of fellow economists in America, Italy, and the world. This book is delightful reading for anybody with an interest in economic theory or policymaking.

Potential readers should be warned, however, that this book is not quite a traditional autobiography. Modigliani moves quickly back and forth across standard autobiographical material, economic theory, and analysis of postwar economic policy in Europe and the US, and closes with a proposal for Social Security reform. Those who prefer to read autobiographies that have no equations may find some parts of the book tough sailing, but for the rest, *Adventures of an Economist* makes for rewarding reading.

It is useful to start with a summary of Modigliani's contributions to economic sciences. The 1985 Nobel award announcement made particular mention of three of his contributions. First came Modigliani's work on personal saving behavior. Starting with the intuition that saving during the working life is motivated by the goal of maintaining a comparable standard of living during retirement, Modigliani and fellow economist Richard Brumberg developed a well-specified life-cycle model of individual consumption and saving behavior. This model of microeconomic behavior had important implications for the aggregate economy, and in a later series of papers Modigliani outlined and tested these aggregate implications. This link from a well-specified microeconomic model to macroeconomic implications was an important leap forward for economic practice.

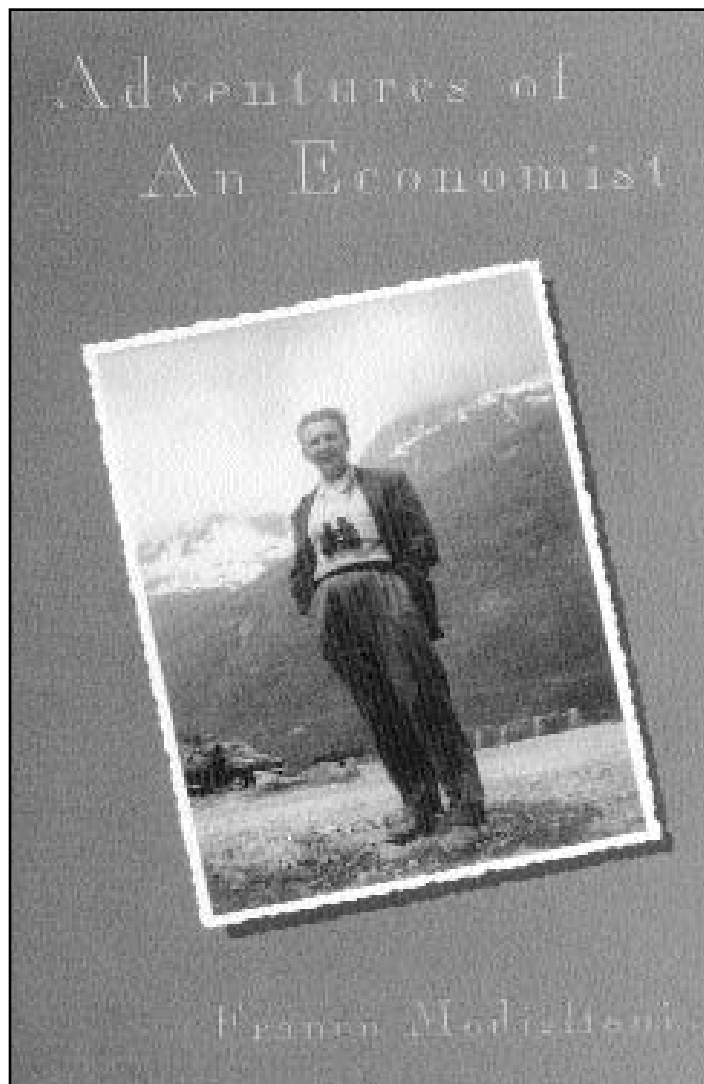
The Nobel committee also cited two joint works with Merton Miller in the field of corporate finance. Taken together, these papers moved corporate finance from the testing of ad-hoc models onto firm economic foundations. Prior to the Modigliani-Merton papers, corporate finance focused on assessing the 'optimal' financial policies for firms to follow. Researchers paid particular attention to assessing how much firms should pay out as dividends, and what mix of equity and debt firms should use to finance their operations.

The Modigliani-Miller theorems showed that, given perfect markets, investors are indifferent about both types of corporate financial decisions. For instance, if investors can borrow and lend at the same interest rate as the firm, they can undo any change in the firm's mix of debt and equity by borrowing and lending on

their own account. Because investors can costlessly undo a firm's leverage decisions, these decisions do not affect the firm's total market valuation. These Modigliani-Miller papers represented a leap forward, incorporating more solid economic reasoning into the analysis of corporate financial behavior.

In addition to these three seminal research papers, Modigliani played a large role in the development of one of the first large-scale macroeconomic models. This model was developed in the 1960s by Modigliani and other academic researchers under the auspices of the Federal Reserve Board, and was the most important macroeconomic model in use at the Fed until the mid-1990s. In his role as a teacher at MIT, Modigliani also trained a long list of prominent economists, including MIT's own Institute Professor Peter A. Diamond.

Adventures of an Economist



gives a picture of the man behind these contributions, and the picture that emerges is one of a witty, caring man whose dedication to truth and to his friends is inspiring. His dedication to economics is also awe-inspiring; pages 20 through 43 of the book are a discussion of Keynesian economics that would not seem out of place in a traditional macroeconomics textbook.

The book is divided into three sections, and the first of these sections comes closest to traditional autobiography. This section describes his upbringing in Rome, where he was born in 1918 and where his father was a prominent pediatrician. After studying law in college, Modigliani was forced by the Fascist persecution of Jews to leave Italy for France and then the United States prior to the Second World War. Arriving in New York City in 1939 with his wife Serena and her father's family, Modigliani's first job was as a wholesale dealer of Spanish and Italian-language books. At the same time, Modigliani studied economics under Jacob Marschak at the New School for Social Research, which at that time was a haven for intellectuals forced by fascism and war to flee Europe.

After completing his PhD in economics at the New School, Modigliani taught at Bard and at the University of Illinois. At Illinois during the McCarthy era,

Modigliani and the other European faculty were forced from the economics department in a purge led by none other than the famous football player Red 'The Galloping Ghost' Grange, who at the time was a trustee of the University. Modigliani was the last of the purged economists to leave Illinois, and he left with a blast that was published in the local newspaper: "Now there will be peace in the Department of Economics: The peace of death!" That Franco Modigliani does not seem ever to have been one to mince words is part of his charm.

From Illinois, Modigliani went to the Carnegie Institute of Technology, where he spent eight years in a department led by future Nobel Laureate Herb Simon. It was during this period that Modigliani and Merton Miller developed their theories that would revolutionize corporate finance. He paints a memorable picture of the Carnegie department during this period:

Herb Simon eating the same lunch of American cheese on white bread every day in order to save the time spent deciding what to have. Modigliani came to MIT in 1960, where he has been a central figure in an economics department that includes fellow Nobelists Paul A. Samuelson and Robert M. Solow. From MIT, Modigliani has served as an advisor to the Federal Reserve, the Treasury, and the Italian Central Bank, and the second section of the book, a history of exchange rate policy starting with the collapse of the Bretton Woods era, reflects his wealth of knowledge. At this point Modigliani makes the first of

his policy prescriptions, that the persistently high rates of unemployment in Europe must be relieved by old-fashioned Keynesian monetary stimulus.

The third section of the book, entitled 'Italy and Me,' is primarily a reflection on Italian economic policy since the 1960s, peppered with reflections on differences between his adopted and his native lands. The most striking part of the section comes when Modigliani relates how, while being interviewed for Italian TV in 1979, he learned of the politically-motivated jailing of a deputy at the Bank of Italy. Modigliani immediately stopped the interview, saying on TV that he would refuse to work further in Italy until the deputy was released and cleared.

Particularly striking are his thoughts on the nature of citizenship; some are deeply moving: "When a state goes against the conscience of one of its citizens, she or he has the right to protest and must have the right to fight against its decisions. Our Fatherland is humanity, friendship, fair play — values that stem from deep within the conscience of each of us and that the state must respect." Indeed, for all the economic theory, policy, and equations, the reader will come away from Franco Modigliani's *Adventures of an Economist* moved most by his human qualities of compassion, honesty, and wit.

As Opening of Simmons Nears, Many Decisions Still Pending

Simmons Hall, from Page 1

coffee house, and a dining hall. Although the Founders Group has left many of the details of the coffeehouse and dining hall for Simmons residents to decide, it wants to mandate a meal plan for all Simmons residents.

Simmons Hall has run up an \$88 million construction bill despite an initial donation of \$20 million from Richard Simmons '53. "I am really surprised that it is so expensive and does not even have air conditioning. 70 Pacific houses twice as many students and costs only \$2 million more," said former GSC President Soulaymane Kachani G.

"The Simmons Founders Group [therefore] wants a commitment to Simmons' community as well as its dining... for financial and social reasons," said Richard D. Berlin III, Director of Campus Dining. To support the dining hall financially, each resident will be entitled to subscribe to a meal plan that will be added to the house bill.

The Founders Group has not yet decided upon a specific meal plan or minimum subscription to the meal plan because they want to see what type of meal plans residents would prefer. It does believe, however, that since students will be serving themselves and that there is a demand for more meal-based, rather than à la carte dining, then a meal plan is the best solution for Simmons.

Simmons dining will offer an outdoor dining section as well as a large menu variety. It will include a grill, a deli, burners, hot entrees, a salad bar, a bakery, and a beverage section. "I would like to see numerous food options, particularly healthy food and vegetarian food," Berlin said. "I would really like to see residents of other living groups eating at Simmons."

Simmons' unique coffeehouse will be located by the dining hall and multi-purpose room. The Founders Group believes that the coffeehouse will most likely open at the end of dinner and close at 2 AM. "We want to supplement the options to nighttime dining at MIT," said Founders Group member Jeffrey Roberts '02.

The Founders Group has also created the coffeehouse as a supplement to the dining hall and multi-purpose room. "If somebody misses Simmons dining, then he can go to the coffeehouse to buy a prewrapped sub. If a group saw a play in the multi-purpose room, then they could get coffee at the coffeehouse," Berlin said.

Simmons solicits 2002 residents

The RLSLP office will open Simmons to undergraduate residents this year on a voluntary basis. "We hope to keep the same proportion of upperclassmen to freshmen which will become 65% to 35% in 2002," Roberts explained. "We also hope to see an even mix of each class."

To foster a community within Simmons, the Founders Group will solicit potential Simmons residents in the fall for house meetings. "We are trying to promote the idea of starting a new community and shaping a dorm," Roberts said. "We are hoping to find people who are legitimately interested in creating a dorm character."

In these house meetings, the Founders Group would like to discuss issues such as dining, ordering furniture, rooming assignments, and forming a house government. The members of the Founding Group have been debating all of the feasible options for the dorm in preparation for these house meetings. "We want to run our ideas by the people who will actually be affected by them before making decisions," Roberts said.

Finding Simmons Residents

RLSLP and The Founders Group do not foresee that it will be difficult

to find upperclassmen to live in 65% of Simmons Hall. They believe that students will want to contribute to the history of Simmons and will enjoy the living arrangements of the dormitory.

Simmons will provide only singles and doubles to its residents. "I anticipate that we will receive requests from people who will try to get a single instead of a crowded room," said Manager of Undergraduate Residential Services Phillip M. Bernard.

"I cannot tell at this point exactly who will want to move into Simmons," Roberts said. "Although Simmons will be on the west side of campus, I hope that people from east campus dorms will be interested in bringing east campus culture into Simmons."

"More people from Next House, New House, and MacGregor might move to Simmons Hall because they are already used to the west campus walk," Bernard added.

Nonetheless, RLSLP does not believe that fraternity pledging will be negatively affected by the creation of Simmons. "Freshmen will still want to eventually move into the FSILGs because of the appeal of brotherhood," Bernard said. "People will still realize how great the MIT FSILGs are."

Unique Simmons Design

Simmons will house 350 undergraduates, the average number of freshmen living in FSILGs over the past few years. 75% of the rooms will be singles, and the remaining rooms will be doubles. Architect Steven Holl has designed the rooms in assorted clusters to span the ten floors of Simmons; each cluster will have its own bathroom.

Each Simmons cluster will include two to three rooms, a bathroom, and a vestibule entryway. "It is different from the design of the other dorms," Roberts said.

"The Simmons singles will not be much larger than those of other dormitories," Roberts said. The ceiling, however, is expected to measure 9.5 feet. As a result, the Founders Group has been exploring various furniture options to take advantage of the high ceilings.

In fact, *Progressive Architecture* has already recognized Holl for Simmons Hall's blueprints. These designs include 8 atria and terraces. "There are not many floors which resemble another floor in Simmons in the designs," Nilsson said. "Simmons is being designed to be a different and unique dorm."

NW30 hosts conference guests

120 first-year graduate students will be living in NW30 on August 16 for the start of graduate orientation. Each room is a studio single that will be furnished. "By adding another dorm to campus, we will be integrating more graduate students into the campus community," said Capital Projects Communications Manager Teri F. Weidner.

To ensure that social activities will occur at NW30, future Housemaster Steven R. Lerman '72 has selected a few continuing students to serve on the house government. These students will be paid for the position.

NW30 residents will sign a nine-month lease and cannot live in the dormitory during the summer, when the Conference Committee will be using the dormitory for conferences and guests. "Twelve-month housing would be ideal, but there is always some extra housing in the grad dorms during the summer," said NW30 Founders Group member Jenny Farver G.

"We wanted to design the dorm so that it would suit the graduate students need and be adaptable for the summer guests," Nilsson said. As a result, NW30 will have seminar rooms on every floor and a multi-purpose room on the first floor. The sem-

inar rooms can be used for classes during the year, and the multi-purpose room can be used to host parties.

Nevertheless, RLSLP designed the building primarily for students and then for guests. "We have always looked for graduate students' need first. We looked at other graduate dormitory facilities and duplicated the best features of each," Nilsson said. "Our secondary priority is our summer guests, and we did not make any compromises for them."

Nonetheless, the summer guests have affected some of The Founders Group's decisions. "I feel that if the dorm were to be built again for graduate students on a twelve-month lease, then the present model would not be that model," Farver said.

The Founders Group felt that they had to make the dorm as comfortable as possible for the summer guests even though some graduate students will appreciate the dorm's features as well. "For example, we could have made rooms of doubles or had people share kitchens," Farver said. "Those are less comfortable options, but they could have lowered the rent and made the dorm more cost-effective."

Although this limits the type of student who can live in the dormitory, students who participate in some of the nine month programs or MBA students will not be affected by the summer guests. "MBA students intern in their summer and not necessarily in Boston," said Kachani.

In addition, NW30 will be an expensive graduate dormitory for first-years. "The summer guests, who will pay a nightly rent for the dorm, will help finance the dorm," Farver said.

As a result, the GSC has sought ways to reduce the rent for graduate students to \$800 per month. "Tang, the other dorm for first-years, is fairly low in rent, but 224 Albany is more private and offers more amenities. 224 Albany might attract more students in progression programs because they might have more resources and might want the extra comfort," Farver said.

Although the nine-month lease and the costly rent may dissuade some who would otherwise live at NW30, the graduate students are excited to see another graduate dorm. "We prefer a building to nothing," said Kachani. "We understand that conference guests will bring much money to MIT and alleviate the great demand for conference housing," Kachani said.

In addition, "undergraduates should benefit because they will have more summer housing on-campus," Farver said.

70 Pacific Update

RLSLP expects that 70 Pacific will open next year for a maximum of 750 graduate students living in mostly singles and some doubles. When 70 Pacific opens, almost half of graduate students will receive on-campus housing.

Analogous to Simmons Hall, the 70 Pacific Street Founders Group has designed several unique features to develop a graduate community. They include a courtyard, common rooms, a multi-purpose room, a kitchen, an administrative office, a music practice room, a game room, and a fitness center. "Unlike 224 Albany, everything about 70 Pacific is for building a graduate community," said Farver, who also serves on the 70 Pacific Founders Group. According to Kachani, because the Founders Group hired Senior Real Estate Officer Treasurer Michael K. Owu, they were able to add these features to the dorm and not make the dormitory expensive.

In an effort to open 70 Pacific to the graduate community, all MIT graduate students will be granted access to its first floor multi-purpose room without having access to the living space.

Meals Not an Option

By Jeffrey Greenbaum
STAFF REPORTER

Simmons Hall will open with a dining hall and coffeehouse, which the Founders Group believes will enhance the residential dining system. After Simmons dining opens, the Dining Office hopes to renovate its existing residential dining halls to further develop the MIT undergraduate community. To add diversity to undergraduate dining options, the Simmons Founders Group has decided to establish a mandatory meal plan for Simmons residents.

Berlin has been discussing several new dining options for residential dining with the Founders Group. Under consideration are seven or nine meals per week for Simmons, provided that it is financially viable. "I support the notion of weekend dining, since it is hard to find food at MIT on the weekends," said Director of Campus Dining Richard D. Berlin.

The Founders Group aims to create a meal plan for Simmons in order to satisfy a growing demand for meal-based dining. The Founders Group and Berlin do not yet know the type of meal plan or level of commitment they would like for the plan. Although they have discussed one in which students could pay for a fixed number of meals per week, the group has concerns that this plan may discourage those without a large subscription to the meal plan from entering the dining hall.

"I think that MIT students are going to be resistant to any sort of forced dining plan, even if localized to the residents of particular dorms," said UA Dining Committee Chair LeeAnn L. Henn '02. "Simmons residents will be just like any other MIT students, and will be just as busy ... so there will be conflicts because of time and distance issues."

In fact, neither Berlin nor the Founders Group knows if Aramark will work in Simmons Hall. The dining service's contract ends after next year. "It is [therefore] perfectly possible that another food vendor will work at Simmons," Simmons Founders Group member Jeffrey C. Roberts '02 said.

After completion of Simmons, Berlin believes that the residential dining halls need to immediately begin renovating in order to help build the MIT community. "We need to support freshmen moving to campus," Berlin said. "I would like to see everybody who lives on-campus have the opportunity to eat at a dorm that's within a reasonable geographic proximity."

"Simmons will serve as a catalyst for a lot of changes that we hope to make in MIT dining," Berlin said. After Simmons, Berlin hopes to develop Next House, Baker, and McCormick and complete renovation of Next House dining by the fall of 2002.

"Next House Dining is small for its number of residents," Berlin said. "The food is pretty good considering what it works with, but it can be doing better."

Next House has been exploring the option of adding outside dining to give its residents a view of the river. In addition, according to Next House President Daniel P. Riordan '02, Next House has been discussing hiring outside chefs from Boston and local restaurants on an occasional basis. Riordan feels that if hiring these chefs is financially viable, then it will add a substantial variety of food.

This year, Riordan was excited to see that Next House dining added a means of making stir-fry food and welcomes these changes because "having dining in your dorms where dorm residents can socialize over all meals contributes to building a residential community."

In fact, Next House's kitchen will be used to prepare Simmons dining. "This will lead to a great synergy between Next House and Simmons dining if they will be working and opening together," Berlin said. "We want to offer these features to these two dorms because of their geographic separation from other dining options."

Renovations to Baker and McCormick dining are in the works to include a greater variety of food options and more frequent dining.

Berlin is exploring the idea of reopening Burton-Conner's dining hall and Walker Memorial for dinner. By opening Burton-Conner and Walker Memorial dining halls for dinner, "every dorm on west campus and east campus will be in close proximity to another [residential] dining hall," Berlin said.

The Dining Office hopes to see a greater sense of community at MIT. "I would like to see students eating at dorms at which they are not residents," Berlin said.

With the potential of an intricate residential dining system, Berlin feels that the evening demand for Student Center dining may decrease. The only current multi-purpose room in the student center is La Sala de Puerto Rico. Therefore, "if the Dining Services closes Lobdell for dinner, then another multi-purpose room could exist in the Student Center," Berlin said.

70 Pacific will also include two retail spaces that will be open to the community as well as to 70 Pacific residents. "I would like to see one of the retail spaces offer food because I know that will please graduate students. The other space can be used as a dry cleaner or a barber shop that both the community and residents would appreciate," Kachani said.

Other special features to 70 Pacific include its large park and parking lot. The Founders Group hopes that residents will make full use of the park to further develop a sense of community. It also foresees that its residents will greatly appreciate the parking lot, which will accommodate over 200 residents. Although the dorm rent has not yet been determined, "we feel that this dorm will appeal to many graduate students

because of its sense of community," Kachani said.

The Founders Group is currently exploring the idea of housing married students. "Having children will create a difficult environment and spouses will take away from the 750 maximum," Farver said. However, "if there will be two new graduate dorms then anybody should have the option to live in either of them."

Solution to Crossword

from page 17

TNT	ELIDE	PHONY
HOE	AILED	AERIE
EVA	SALESCLERKS	
MARTYR	HID	
JAR	HABANERAS	
PREDICATES	DOSE	
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OAK	ELK	BEE
ODE	REMNANT	TRE
EURO	MAELSTROM	
YPSILANTI	LEGG	
LAN	RIFLED	
MARCUBALLEN	ORE	
ALIAS	BEING	RIB
CLONE	CODES	YET

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Media Lab Soldiers On With Expansion

By Rima Arnaout
NEWS DIRECTOR

Despite a snag in negotiations with Korea caused by an apparently premature Korean newspaper article, and recent criticism in the press over the slow progress of Media Lab Europe, MIT will continue efforts to create Media Labs in many countries, according to Media Lab Senior Research Scientist Walter R. Bender.

With its most recent agreement to establish a research center in India, the MIT Media Lab is continuing to export its research projects and personnel around the world.

"Things in Korea are at a more advanced stage in terms of discussion than they are at any other place," Bender said. However, Bender also said that the June 21 article in the Korean Internet publication Donga.com, announcing that Media Lab Asia would be established in Seoul, was "very premature ... an internal lobbying effort more than anything else."

"We are open to discussing pretty much everything with everybody," Bender said. The MIT Media Lab is already involved in research collaborations with many labs around the world, in countries like Korea, Mexico, Costa Rica, Thailand, Brazil, Denmark, and Senegal. In certain countries, MIT may decide to unify its research collaborations under the Media Lab name.

Right now, MIT involvement in Korea is "more of a research project rather than anything more than that, and we'll see where it goes," Bender said.

MIT launches Media Lab Asia

While talks with Korea have been temporarily confused by inaccurate news reports, the Media Lab has continued its expansion by entering into a one-year exploratory agreement with the Indian government to establish a 10-year long Media Lab Asia project.

As part of the year-long contract, the Indian government has pledged \$12 million, \$1.7 million of which goes to MIT. Media Lab Asia is "really more of a research project than a lab," Bender said. "We're trying to act as a catalyst for a lot of activity in India."

After Media Lab Europe's opening earlier this year, MIT received calls from around the world hoping to recreate the Media Lab in their countries, but MIT wasn't interested, Bender said.

"But then we got a call from India. We got seduced by the scale, the complexity, the challenge of what we might be able to do in India. The idea is not so much to put together a replica of what we did in Dublin but instead to think and explore what ... how we might get together to structure a research program in India," Bender said.

The Media Lab is especially interested in applying new technologies to the developing world. "I think the lab tries to find a nice balance between short term and long term problems," Bender said. "Right now we think there's a real need and a real opportunity to focus on the impact of technology on the third world."

India and MIT have not yet specified a location for Media Lab India, although Bender said they may choose the region in southeast India where ITT India is based,

since MIT has been in collaboration with that company for over two years.

Digital village sees funding cuts

Along with the opening of Media Lab Europe earlier this year, the Irish government has also launched a \$100 million initiative to develop the surrounding area into a digital village. While Irish funding of Media Lab Europe has stayed at its original level, the Irish government halved investment in the digital village in May, according to The Irish Times.

"In addition to establishing Media Lab Europe, the Irish government set aside some funds to establish a big technology center around the neighborhood where Media Lab Europe has been built, to use it as a cornerstone to breathe new life into that part of town," Bender said. "The funding for the technology center has been cut back somewhat."

Media Lab Europe was the first fruit of MIT's yearning to create an entrepreneurial research laboratory abroad. "Six years ago, we got it in our heads to see if the Media Lab model of combining academia and research could work at a place other than MIT. So we began talking ... people at all levels of government, academia, and industry in different parts of the world," Bender said.

"We had a few false starts, but the first, Media Lab Europe in Ireland, had its grand opening a bit less than a year ago," Bender said. MIT entered into a 10-year contract with the Irish government to start and run Media Lab Europe. In addition to funding Media Lab Europe, Ireland gave \$40 million to the MIT Media Lab.

Media arts and sciences spreads

With the launch of the OpenCourseWare initiative, the MIT-Cambridge alliance last year, and numerous MIT-industry partnerships, one may wonder whether the expansion of research labs within the Media Lab is part of a trend to franchise that which makes MIT unique. Bender, however, thinks that expanding the Media Lab abroad is positive for both the collaborating nations and MIT.

"The idea behind Media Lab Europe was to see whether we can't infect Europe with the same spirit of exploring, risk-taking, and fun that the Media Lab represents," Bender said.

Bender also noted the importance of increasing awareness and participation in media arts and sciences. MIT created the Media Arts and Sciences program when it started the Media Lab and is the only university that offers it.

"We think that media arts and sciences is bigger than just the Media Lab and bigger than just MIT," Bender said. "To some degree, part of our interest in engaging in these sorts of programs" is to spark development of media arts and sciences elsewhere, Bender said.

"That being said, MIT remains a special place, and our relationship to MIT is really central to how the Media Lab works," Bender said.

While the MIT Media Lab received funding to help start both Media Lab Europe and Media Lab Asia, both research laboratories are classified as non-profit organizations independent of MIT.

Lori Berenson Convicted in Peru

By Shankar Mukherji
ASSOCIATE NEWS EDITOR

Former MIT student and New York native Lori Berenson has been convicted on charges of terrorism by a civilian court in Peru. Berenson, who has served five years in the Peruvian prison system, could face an additional fifteen if the conviction is upheld in the appellate proceedings.

A three-judge panel found Berenson guilty of collaborating with Tupac Amaru Revolutionary Movement (MRTA) forces with the intent to take the entire Peruvian Congress hostage.

The tribunal, which was careful not to brand Berenson an outright "militant," concluded that she rented a house in Lima to harbor the Marxist group, purchased computer and communications devices for the group, and used her press credentials to survey the halls of Congress and help plan the imminent attack.

In addition to the 20-year sentence imposed by the court, which was the minimum requested by the prosecution, Berenson will be fined roughly \$28,000.

Following the sentencing, Berenson maintained her innocence.

"I've been classified as a terrorist," Berenson said. "I am not a terrorist. I condemn terrorism, and I want to reiterate that."

In an interview with Reuters, Berenson remained optimistic about being freed before 2015.

"This was not a fair trial. It's all based on hearsay, and I think that's insane," Berenson said.

"I'm not the monster they make me out to be. That has to come out and it may take a while but it will come out before 2015," she added.

Meanwhile, human rights groups have begun exploring other avenues by which to free Berenson. Among the more promising is the possibility of a presidential pardon from newly-elected Alejandro Toledo as a gesture of goodwill toward the United States.

Toledo, however, has reportedly ruled out any special favors for the American-born Berenson, saying to reporters in New York that, "[The trial] was open. I'm not a judge, nor am I a lawyer, and I am respectful of the independence of the institutions."

Parents speak out

Berenson's parents, Mark and Rhoda, issued a press release immediately following the court proceedings, blasting what they considered an unfair decision.

"Even before this trial began we knew that, as responsible and experienced observers worldwide uniformly recognized, a fair trial in Peru on terrorism charges in its special civilian court ... would not be possible," they wrote.

"We can only hope that the Appeals Court will look carefully at what has occurred in this trial and will reverse the verdict. Meanwhile, we will continue our efforts at the Inter-American Commission for Human Rights."

The Berensons, who attended the court proceedings in Lima, have been outspoken advocates for their daughter throughout the six-year saga. In addition to waging a fierce public relations campaign on her behalf, they have created the Committee to Free Lori Berenson, a non-profit organization that lobbies lawmakers and disseminates information regarding her case.

Activist groups drum up support

Human-rights groups and activists worldwide expected the guilty verdict and have rallied around her cause.

"Some of the facts of her case are questionable, but what is beyond doubt is the unfairness of her original and new trial, which is reflective of a general denial of civil rights in Peru," said David J. Strozzio G, former president of MIT's Amnesty International chapter.

"Lori's case is symbolic of the lack of justice throughout the world. The U.S. government is supposed to protect all of its citizens who are treated unjustly abroad, but instead, it protects those that have a political pay-off and ignores the rest," said Aimee L. Smith G, a member of the Social Justice Cooperative.

According to the United States State Department, "There have been numerous accusations of human rights infractions. Reports of torture, and the lack of accountability and

process, remain areas of concern."

Berenson holds ties to MIT

Berenson, who was an MIT undergraduate in the late 1980s, first became acquainted with the people and culture of Latin America through her work with late anthropology professor Martin Diskin.

Soon after Berenson dropped out of the Institute, she moved to Latin America, eventually settling in the Peruvian capital Lima in November of 1994. There she rented a four-story house, which was also inhabited by more than 15 members of the MRTA.

In November 1995, Berenson was arrested on charges of treason and was convicted by a military court six weeks later. The hooded judges who presided over the trial subsequently sentenced Berenson to lifetime imprisonment without the possibility of parole.

Having spent most of the past five years in an Andean prison cell, Berenson was granted a new trial last August by a military tribunal in what appeared to be an effort by an embattled President Alberto K. Fujimori to better relations with the United States.

Since then, Fujimori has fled the country amidst a corruption scandal, and his adversary Alejandro Toledo will assume the presidency on July 28. All throughout, however, Peruvian public opinion has consistently weighed against Berenson.

Still, her supporters continue to fight on.

"I think the appeals process could bring a change if the US government takes an active interest in the case," Smith said.

Timeline

1988	Lori leaves MIT to live and work in Latin America
1995	November 30: Berenson is arrested on charges of terrorism
1996	January 8: Berenson is presented as a "gringa terrorista" and convicted in military court; she appeals the decision
	February-March: Berenson's subsequent appeals are all rejected by Peru's Supreme Military Court
	December 7: Mark and Rhoda Berenson visit their daughter in prison for the first time
1997	December 5, 10: 52 senators and 175 representatives pledge their official support for Berenson's quest for a new trial
1998	October 7: Berenson is moved out of Yanamayo prison for medical tests; she is subsequently transferred to Socabaya where she is held in solitary confinement
	December 23: Amnesty International issues an "Urgent Action" on Berenson's behalf
1999	February 2: Berenson's period of solitary confinement ends after 115 days
	October 14: The Committee to Free Lori Berenson opens its headquarters in Washington, D.C.
2000	August 28: Berenson's sentence is nullified and her case is removed from military court jurisdiction
2001	March 20: Peru opens a public, civilian trial against Berenson
	June 20: The civilian tribunal convicts Berenson and sentences her to 20 years imprisonment

Gast Named as New VP for Research

By Nancy L. Keuss
ASSOCIATE NEWS EDITOR

Professor Alice P. Gast, Associate Chair of the Department of Chemical Engineering at Stanford University, will assume the positions of vice president for research and associate provost, effective in the fall.

"Alice is a renowned researcher, scholar and educator and a tremendous advocate for research," said Provost Robert A. Brown in announcing the appointment. "She will add a wonderful perspective to the leadership of MIT in these and other important areas."

Dr. Gast will be the Robert T. Haslam Professor of Chemical Engineering in addition to her administrative positions.

Professor J. David Litster PhD '65 will continue to serve as vice president and dean for research until Professor Gast arrives on campus.

Financially, about one-third of MIT's research takes place in interdisciplinary labs and centers that report to the vice president for research office. Thus, MIT policies on research and intellectual property are a main focus of the position.

"That's an important focus. The job is rather complicated and has several important aspects," Litster said.

The vice president and dean for research also deals with academic misconduct.

Litster has advised the Provost that there should be some changes in the responsibilities of the vice president and dean for research, as well as in the position of associate provost.

"I wouldn't be surprised if those two offices will have somewhat different and increased responsibilities than they have had in the past," Litster said.

Gast will supervise the Institute's sizeable inter-school laboratories and coordinate policy regarding research and graduate education. Working with Provost Brown on these areas, she will deal with the budgeting process and planning, assignment and utilization of space at the Institute. On matters of graduate education policy, she will report to Chancellor Phillip L. Clay PhD '75.

Professor Gast, an expert on complex fluids and colloids, joined the Stanford faculty in 1985 after earning the PhD from Princeton

University. Gast's research involves exploration of the chemical physics of colloidal and polymer solutions and polymer adsorption. More recently, she has focused her research on proteins, using experimental scattering methods and statistical mechanics.

The co-author of a classic textbook on colloid and surface phenomena, Dr. Gast been recognized with an array of honors, including a Camille and Henry Dreyfus Teacher Scholar Award and the Allan P. Colburn Award of the American Institute of Chemical Engineers.

The valedictorian of her class at the University of Southern California, Gast earned the BSc in chemical engineering in 1980, and went on to receive an MA (1981) and PhD (1984) from Princeton University.

A member of The American Association for the Advancement of Science, the American Chemical Society, the American Institute of Chemical Engineers and the American Physical Society, Professor Gast was elected to the National Academy of Engineering this spring.

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OpenCourseWare Gets Funded

OpenCourseWare, from Page 1

ation of OpenCourseWare, together with Professor of Civil and Environmental Engineering Steven R. Lerman '72 and Professor of Electrical Engineering and Computer Science Harold Abelson PhD '73.

"OpenCourseWare, in some sense, is a way for MIT in particular, but the modern higher education [in general], not to fall into this area where educational content is viewed in a monetary way," Yue said.

Victoria K. Anderson '02, outgoing chair of the Student Committee on Educational Policies, expressed support for OpenCourseWare.

"Our consensus from this past semester is that if MIT is going to spend time and money on this, it should benefit students in some way," Anderson said. "We believe that in the current proposed format, OpenCourseWare will benefit the students, as we will have increased access to information, the ability to better 'shop' classes before the semester starts, and a chance to remain part of the scholarly community at MIT after we graduate."

MIT is expected to follow the key recommendations that a task force recently submitted. Headed by Yue, the task force suggests that a professional, centralized organization administer OpenCourseWare. An executive director, ideally an outside professional with management and administration background, would head the project, and report to a faculty director, like an Associate Provost.

Another task force recommendation involves making OpenCourseWare centralized but with "strong relationships" to departments and schools. Liaisons would be assigned to each but will not be independent of the central organization.

An interim management committee, responsible for the search and hire of the executive director and other top managers, is in place. The committee, which is eyeing top information technology executives, should complete its hiring within several months.

Other responsibilities of the interim committee include coordinating communication, both internally and externally, and exploring possible partnerships or relationships.

"Since the announcement of OpenCourseWare, there has been lots of interest in working with us," Yue said.

Reactions within the MIT community have been mostly positive, despite reservations about the effect on the education of students at MIT. Some questioned whether it would devalue the MIT education and take faculty and staff time away from students.

"I think it's a really good idea," Kelly N. Zimmerman '04 said. "It's with good intentions, but I'm also curious as to what is going to happen to the current MIT students. Why bother to pay the \$30,000 when you can get it for free?" Zimmerman is the new chair of the Student Committee on Educational Policies.

Redwine fends off suggestions that the MIT education will in any way be devalued.

"The essence of [an MIT education] is what happens on campus, working together with faculty and each other. What would people think if we charged them our tuition and sent them a large box of books? In some ways, OpenCourseWare is analogous to that box of books," he said.

Many look to the introductory computer science class, Structure and Interpretation of Computer Programs (6.001), to see what OpenCourseWare will be like. The course Web page features lectures, lecture slides, problem sets, projects, the textbook, and all course information.

Meredith L. Gerber '04, a 6.001 student this past semester, believes putting material for more classes online "would be really helpful. I wouldn't have to carry around x-pounds of books. I could just find an Athena terminal."

Redwine agrees, saying, "We hope and expect this will make it possible for all or almost all to have

that sort of material. The truth is I don't think anyone knows how positive of an effect that will have."

He also acknowledges that faculty time is a concern.

"I think that is the most important thing in terms of making it work is to help the faculty put this on the Web and keep it updated. In many ways the most precious quality here is faculty time, and there are only 24 hours in a day."

The Mellon Foundation, formed in 1969 by consolidating two foundations started by the children of Andrew W. Mellon, is known for its support of higher education. Other areas of funding include cultural and performing arts, population, conservation, and the environment and public affairs.

"There are quite a few grants we've made in recent history that have to do with higher education and technology," Associate Program Officer of the Mellon Foundation Saul Fisher said. "OpenCourseWare is the latest and greatest in this line."

The Hewlett Foundation, founded in 1966 by William R. Hewlett and family, also funds many educational ventures. Its funding emphasis is on performing arts, population issues, the environment, conflict resolution, family and community development, and US-Latin American relations.

"We think it's an important experiment with the way universities deal with their intellectual property," President of the Hewlett Foundation Paul Brest said. "What this will look like ten or twenty years from now ... who knows? But we think this is a very promising direction."

Many find that benefits to those outside MIT are the true reason for the project. Yue believes that many faculty support the project in part because it "appeals to the moral higher ground" by forgoing any attempts to commercialize on the information.

"If MIT sets a good standard and model of how to do it, other people will follow," Yue said. "Then we will have truly changed the landscape."

Leading Private Colleges Adopt New Guidelines for Awarding Financial Aid

FROM UNIVERSITY WIRE

MIT joined with 27 of the nation's most prestigious private colleges and universities in announcing an agreement last Friday on new financial aid guidelines aimed at better calculating and fulfilling students' financial need.

The agreement comes after two years of discussion among the 28 college presidents on ways to control "bidding wars" between peer institutions for the most talented students.

Schools committing to the new guidelines include Stanford, Yale, Cornell, Columbia, and Wellesley.

"In all too many instances, aid is going to the squeakiest wheel, rather than to the neediest students," said President Charles M. Vest in an interview with *The New York Times*. "By adopting a consensus approach to need analysis ... we will assist families in understanding and comparing our institutions."

Under the new guidelines, the method used to calculate a student's family contribution would take into consideration factors like cost of living and rising property values. According to a report released by the 28 schools' presidents, only home equity that does not exceed 2.4 times a family's income should be considered in calculating need.

The agreement also has provisions for parents who are not covered by retirement plans and stu-

dents of divorced parents who have remarried. Schools that previously considered the assets and incomes of both parents and stepparents will now only consider the financial status of two adults.

The new guidelines are expected to take effect within a year.

The agreement comes in response to a belief that commitment to need-based aid has been threatened by competition between top-tier schools to attract the most desirable students with merit-based scholarships, said John Burness, senior vice president of Duke University.

"The principle is that aid should be awarded based on the student's need more than any other factor," Burness said.

The new guidelines are expected to decrease the amount of money families are asked to contribute in most cases and increase the amount of grant money as well as need-based aid awarded, Burness said.

Two notable absences from the agreement are Harvard and Princeton, both need-blind schools.

"They felt that some of the provisions of the consensus would be less advantageous for their students than what they already do," said Henrik Dullea, Cornell's vice president for university relations. "For instance, Princeton is no longer considering home equity at all."

(By Elizabeth Taylor - *The Daily Texan*, 07/09/01)

Barnes Recommends More 'Adult' Manager

ATO Decision, from Page 1

the form of instruction. On the other hand, he said, since the underage drinking was a direct violation of the law, and not a first offense, ATO deserved "negative discipline" in the form of a suspension.

Billing spoke about the Speak Out community forum, which ATO co-sponsored, as well as the diversity symposium and sensitivity training planned for next year.

Randolph called events immediately following the Spring Weekend incident "the most educational moment" in the time he had been at MIT. He added that alcohol is "an issue we're grappling with" and asked the CLC to "give us a chance to continue that process."

"That's what we did the first time," Barnes said.

Commission discusses racism

Billing contended that no racial slurs were shouted from the roofdeck.

"There were four or five African Americans of the 24 or 25 people on the roofdeck" that day, Billing said. "If something had been said, they would not have stood by" and done nothing.

Billing added that one person who used the word "black" had apologized immediately and been reprimanded.

Racism is "not a problem I'd imagine us having," Billing said, pointing out that minorities comprise about 40 percent of the chapter.

"Just because you live in a diverse community, it doesn't mean racism doesn't exist" there, Barnes told Billing at the end of last night's hearing.

Billing agreed that by living in a diverse community, "maybe at times we become too comfortable, and we say things we wouldn't otherwise say."

CLC to watch for improvement

An additional 10-day suspension must be served if the CLC fails to see the fraternity taking "positive steps."

Barnes recommended that the suspension not coincide with rush based on testimony from Billing detailing the importance of rush to the fraternity.

Additionally, Barnes recommended that ATO and the Office of the Dean for Student Life look into finding a "more adult [house] manager." Billing is 22 years old.

George S. Gluck '02 said ATO also retains an older resident adviser, Thomas J. Klemas '92.

"Expecting far worse"

Randolph called the CLC's sanction "a reasonable outcome."

"I'm grateful it wasn't more serious," Gluck said. "I was expecting far worse."

"I'm content," Billing said. "I feared the worst, even though I feel we deserved the best. Now I'm ready to move on and to do all the things we said we were going to do, to prove that they're not just words."

MIT Sues Over Magazine Trademark Infringement Suit Names AOL Time Warner Company

By Eric J. Cholankeril

MANAGING EDITOR

MIT has filed a lawsuit against an AOL Time Warner company in U.S. District Court in Boston over the use of its *Technology Review* trademark in a new magazine.

The complaint names Time Inc. and CNET Networks, Inc. as defendants, charging them with "trademark infringement, famous mark dilution, unfair competition, and violation of Massachusetts General Law."

In January, *Fortune* magazine and CNET announced the joint publication of the *Fortune/CNET Technology Review*, a biannual special issue of *Fortune* magazine which first hit newsstands in June. Formerly published as the *Fortune Technology Guide*, the *Review* has a circulation of 1,200,000, including all of *Fortune's* North American subscribers and CNET's registered users.

MIT has owned the trademark "Technology Review" since October 1958, when it was registered with the US Patent and Trademark Office by the Alumni Association of MIT. The trademark was last renewed by MIT's Technology Licensing Office in April of 1999, for a 10-year period.

Technology Review has been in publication since 1899 and by next January will have a circulation of 300,000, of which 80,000 are

alumni subscriptions.

"*Technology Review* is trying to stand on its own as an independent enterprise," said R. Bruce Journey, CEO and publisher of the MIT magazine. "Our objective is not monetary damages at all but rather to protect our trademark and prevent confusion in the marketplace."

After informal discussions with executives at *Fortune*, a cease and desist letter was sent to Time Inc., the publishing division of AOL Time Warner. When Time Inc. refused to

change

the

title,

MIT

reacted by

filing a

lawsuit in

June. Nixon

Peabody

LLP is the

law firm representing

MIT

in the case.

"We feel we

have a very

strong case,"

Journey

said. "We're just a small

business trying to

do its thing, but

we're going up

against a four-hundred-pound gorilla."

"MIT believes that the complaint speaks for itself," Karin Rivard, counsel for the Technology Licensing Office, said.

Bill Stephen, publisher of the *Fortune/CNET Technology Review*, declined to comment on the lawsuit.

Technology Review publishes ten times a year. While it focuses on "promoting understanding of emerging technologies and their impact," the magazine also includes a section containing MIT news and alumni class notes.

Wellesley Sophomore Dies at ATO

ATO Death, from Page 1

President George S. Gluck '02. "Our hearts go out to her friends and family as well as to all others affected by this tragedy."

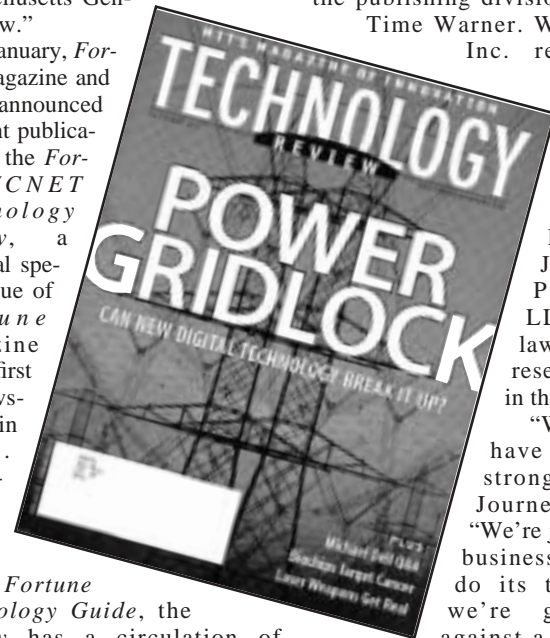
In an e-mail addressed to the MIT community, President Charles M. Vest urged community members to be "caring and alert. We must be willing not only to provide or seek support for other members of our community but also to recognize when we ourselves need help in handling the complexities of life."

The resources of MIT Medical are available to everyone, including summer boarders, in a "crisis situation," according to Randolph.

MIT fraternities commonly rent rooms in their houses to summer boarders, including students from nearby colleges. There are currently about 25 people staying at ATO, including ten members of the fraternity and five other Wellesley students.

Randolph said that the Institute's relationship to summer boarders is one that will have to be re-evaluated, as it is currently "virtually nonexistent."

Regardless of whether MIT is responsible for individuals renting rooms in private residences affiliated with the Institute, Randolph said that at MIT, "we ask what needs to be done before we ask what we're responsible for."



New Chancellor Discusses His Vision for Institute

By Pey-Hua Hwang
STAFF REPORTER

Phillip M. Clay PhD '75 has assumed the MIT chancellorship, following the July 1 departure of Lawrence S. Bacow '72 to become president of Tufts University. *The Tech* sat down with Clay to discuss his vision for the MIT community.

The Tech: What first interested you about this position?

Clay: I guess the thing to say is that I've always valued the opportunity for service. I didn't really campaign for the job, but I was very honored by the opportunity and am taking it with great excitement.

The Tech: Bacow was highly involved in restructuring the residential system. Will you continue this involvement?

Clay: There's a plan in place for the physical changes in the system. All of that will continue. The challenge in the next year is to develop the programs to build up the support for the softer side of the system.

The Tech: What do you mean by the softer side of the system?

Clay: By softer side I'm distinguishing from bricks and mortar and focusing on the programs in the implementation of the system.

The Tech: So you're referring to dealing with more of the people issues?

Clay: That's right. That's what I mean by the softer side of the system. Bricks and mortar have a very limited role in shaping the community.

The Tech: In regards to the new Simmons Hall, do you plan to hold meetings with students?

Clay: Basically, I have to plan for next year when the residence hall opens. I know we have a house master in place. I'm excited about it, but we can't just open the

doors and hand out the keys and expect everything to just be there.

The Tech: Have you worked with former Chancellor Bacow on past issues?

Clay: Well, Larry and I joined faculty at about the same time in the same department, so we've known each other for many years, long before either of us came to the administration. We go way back.

The Tech: Do you view any certain issue as a main focus under your chancellorship?

Clay: My main job is to continue the implementations of the Task Force on Student Life and Learning. I've reread the mission principles recommendations that have now been out there for three or four years, and I still think that that's the game plan for those of us who work in campus life. I would add that the same kind of attention the task force has given undergraduates should extend to graduate students. I want to make it very clear that student life means graduate students as well.

The Tech: How do you plan to keep graduate rent low?

Clay: The whole purpose of developing housing for graduate students is to provide some relief — to provide affordable, dependable housing. I cannot say that rents are going to be cheap, but what I can say is that they will be under our control and not under the control of the market. I wish I could say that they were going to be cheap, but I can't. We will set the rent with a full understanding of what resources the graduate students have. And the rent is only one part of the picture. We have, for example, increased graduate stipends. We want to make sure that they aren't at the mercy of the market. Another aim of graduate housing is to provide graduate students with a basis for student life on campus. I want to support student life for graduate students, and we can

do that by moving them on campus.

The Tech: How will the chancellorship differ from other positions you've held in the administration?

Clay: This position is more student-centered. When I was Associate Provost and department head [of the Department of Urban Studies and Planning], I dealt mostly with faculty. I was the head of a masters degree program, so my dealings there were predominantly with graduate students. The biggest change for me personally is more work with undergraduates.

The Tech: Associate Dean for Students Robert Randolph has said that he believes every student should leave MIT having truly gotten to know at least one professor. What are your thoughts on this?

Clay: I would say it ought to be two or three. These lifelong relationships are important, and they are real. Over the course of their time here every student will have at least forty professors, and you would think that you would know at least one of them, even four or five, relatively well — well enough to remember you after the class is over. Some will get to know you well enough to write an intelligent two paragraphs, to help with jobs, or to give career advice. One of the saddest things I read in *The Tech* was a student who I knew... he wrote a column in which he basically said that he didn't know a single faculty member well enough to count on a very good letter. In practice, we need ways to get more informal interaction between students and faculty, especially in the Institute environment, where both students and faculty are overscheduled and overburdened.

The Tech: This informal interaction was one of the goals of putting faculty in residence halls, but there are many students who

feel that this is an intrusion. How do you plan to get over this hurdle of some initial antagonism?

Clay: I think it's important to listen to students to see what the concerns are. I think many students view the dormitory and the area across Massachusetts Avenue as a different world. That side of Massachusetts Avenue is faculty control, and this side is student control. And I'd like to break that up a little bit. I think there has to be a way for students to learn from faculty, and getting together is not an invasion, and it's not an imposition. The faculty feel comfortable making themselves available for student activities, and students feel comfortable inviting faculty in. This is all about invitations. The trick is engineering the invitation and faculty flexibility. We have to work at it. It's not going to happen spontaneously. I have to figure out how to get it to happen apparently spontaneously... food helps.

The Tech: Do you see the freshmen physics program expanding into other programs?

Clay: We have a number of grants looking for other ways to promote student learning. There are going to be lots of experiments. Some will work, and some won't. They will be similar only in the fact that they will be experiments, innovative, creative. The emphasis ought to be on experimentation. We're encouraging experimentation.

The Tech: So, in the long term what do you see as the MIT of the future?

Clay: If you asked me about some feature of MIT ten years ago, I would have said, "Naw, that would never happen," but the task force really monitors cultural change and issues under pressure. One of these would be the graduate student. Before, when I was graduate student, being a graduate student was like a job. We've gone well beyond that, and I believe we'll go farther. This has to do

with the increasing percentage of graduate students in the population, and that more and more of them are married. More are masters students as opposed to PhD students, and more and more of them are viewing their graduate education as more than grinding deeper and deeper into some narrow subject. That's a cultural change. There are changes and there will be others. The question is whether we take some responsibility in taking advantage of societal changes or whether we sort of sit back and let the hidden hand shape the changes — whether we manage change or become hostage to it.

The Tech: I assume you're a proponent of managing change.

Clay: Well, of course, otherwise MIT is wasting its money paying me. The same goes for deans. We can't just have someone who just sits back and makes sure the bills are paid and doesn't get too deeply engaged in task forces and committees and just lets things happen.

The Tech: How would you encourage graduate-undergraduate interactions?

Clay: That's one of the areas where we really do need to manage it because we have the case of the MEng program where there has been some question of whether the fifth-year student is a graduate or undergraduate. I think we need to take a look at that. We can probably take a lesson from programs that have had lots of masters students in the past.

The Tech: Is there anything else that you would like to let the MIT community know?

Clay: I think I'll hold off on that. I've had a number of conversations with Larry [Bacow], but I've yet to talk with much of the faculty and regular students or student leaders. I'll be getting quite an education before orientation, and I'll probably have something more to say then

The Other Cambridge: A Reporter's First Impressions

By Kevin R. Lang
NEWS EDITOR

I never planned on going to Cambridge — it just sort of happened. How I got there is not terribly relevant, but the fact that I had never considered the possibility of going before I was invited is. I had no idea what to expect, and thus my first week in Cambridge gave me true first impressions. This is my first attempt at putting them into writing, some nine months after first setting foot in England.

English weather sucks

This was my first thought as I flew into Heathrow through heavy clouds and light rain, leaving behind a week of sunny New England skies. Though I rarely encountered torrential rain, and snow was almost nonexistent, I'd estimate that 80 to 90 percent of my days in Cambridge were rainy or at least overcast. I'm convinced that England established colonies

not for economic or political reasons, but just to get a break from the weather. Still, during the bus ride up to Cambridge I started to appreciate the beauty of the English countryside, once I got over the novelty of driving on the left (i.e. wrong) side of the road.

Rain or shine, Cambridge is truly a beautiful city. The River Cam runs beneath centuries-old bridges, past fields of daffodils, and manicured lawns of colleges founded by kings. The architecture blew me away, especially when I first set eyes on King's College Chapel. Any one of the magnificent Gothic or Anglo-Saxon college courts or chapels in Cambridge would be a renowned landmark if it stood alone, but King's is the Eiffel Tower of Cambridge. It's the first image that comes to mind for tourists or would-be tourists, but those who live there see much, much more.

Settling in

After a lunch of fish and chips in a nearby pub, I unpacked until jet lag set in. My room was almost too big. Lacking my normal MIT furnishings — computer, home theater

system, fridge, toolboxes, and everything else that fills my MacGregor single to the gills — my new 15' by 18' room with 12' ceilings felt absolutely empty. Even the location was almost surreal, with a postcard-perfect view of the courtyard and college chapel. I could only laugh later on when friends complained about getting "small" rooms, since the smallest room in college still dwarfed my room at MIT.

As I explored town the next day, I tried not to let myself be overwhelmed by history — my college's 14th century courtyard was once home to Christopher Marlowe, and still houses undergraduates today. I felt like a tourist, possibly because my college predated the Declaration of Independence by a good 400 years. English students are much better at coping with history. My second day in Cambridge I went out drinking with a bunch of math majors and they certainly didn't prattle on about Newton, although they did introduce me to the beauty of a warm pint of proper English beer.

Yet as more and more students arrived, I found myself welcoming back old friends I had never met

before. A college as small as Corpus is more family than community, albeit dysfunctional at times. Within days I knew every face, if not every name, and England began to feel like home. I would always be "the American" to those who didn't know me very well, but my friends often forgot that I was only there for a year.

A different sort of firehose

I was disappointed with my first week of lectures — where was all the work? Where were the killer problem sets? Not to mention that the problem sets weren't even graded! Fortunately, just when I began to wonder if I had made the wrong decision, I started to row. And hit the clubs. And have fun — in the middle of the week, let alone the middle of the term! This was a revelation to me. I could scarcely believe that I had time for five classes, crew, and two, three, sometimes four nights of pubs and clubs each week. All without punting a single lecture or problem set. I think I actually put more time into my problem sets and labs than most Cambridge students, out of MIT-induced habit if nothing else. But to go out drinking on a Wednesday

night is unheard of at MIT (at least with my circle of friends and where I live). My choices at MIT were always between work, UROP, and *The Tech*. At Cambridge, work was a given, so choices fell to which drink, which club, and which party. I wouldn't go so far as to call Cambridge a party school, but compared to MIT, Cambridge looks like Mardi Gras all year long. (Except during exam term, of course, but that's another matter entirely.) I made up for two years of lost time very, very quickly.

My first impressions of Cambridge were somewhat contradictory, but nothing seems out of place in retrospect. I found myself in one of the greatest universities the world has ever known, walking amongst beautiful chapels and quaint courtyards, studying with the best and brightest from England and every corner of the globe. I was just too busy having fun to really notice.

Author's note: This is the first in a series of Reporter's Notebooks on the Cambridge-MIT Institute (CMI). Future articles will address issues such as academics, housing, student life, athletics, alcohol, and other topics relevant to MIT life.

The Samaritans of Boston, a non-profit, non-denominational suicide prevention center, seeks volunteers (16 years and older) to be trained to help staff our telephone befriending services. Accepted applicants will be trained to provide non-judgmental listening and support to lonely, despairing and suicidal individuals. Please call (617) 536-2460 for more information about applying to be a Samaritans volunteer.

Image and Meaning: A New Context for Communication

By Joel Rosenberg

Advisory Board

Sir Roger Penrose, renowned physicist and mathematician, took the first turn at responding to six images presented to the panel for discussion at last

month's Image and Meaning Conference. He interpreted the pictures of a mushroom cloud, a fetus, and Watson and Crick as reminders of the social issues raised by science. He said that a photo of the Earth over the lunar horizon, while a great technical achievement, reminds us that the basic scientific research that got us to the moon in the first place must not be overshadowed. And he took an illustration of the evolution of man and an image of brain activity as reminders that given how little we understand of ourselves, we can't believe that we're the pinnacle of life.

Susan Sontag, renowned essayist and novelist, went next, and interpreted Sir Roger's "shallow" interpretations as a "very normal response" to the "celebrity" images, which she called "the visual equivalent of sound bites." It was an interesting point.

Sontag, a self-proclaimed "scientific ignorant," was criticizing the selection of these famous images that even she recognized. And in doing so, she was challenging the purpose of the conference itself, which Boyce Rensberger, one of its co-chairs, explained was "to stimulate thinking on the part of scientists, photographers, illustrators and writers on how to make more use of the powerful new imagery coming out of science." The images were powerful, but certainly not new. And Sontag didn't think they stimulated much in Penrose, or in herself for that matter.

But the images shown to the panel were an anomaly at the conference, most of which Sontag didn't attend. The presentations over the three days in Kresge *did* stimulate thinking among a diverse group of people who make their living either doing or communicating science; much of the imagery shown *was* powerful and new. From microscopy to mathematics, molecular modeling to the movies, and museums to the mass media, people shared their latest experience with images in their work, and how it is helping their understanding. Sontag just saw the conference out of context. And context was the real point of the conference.

By having images as the focus, journalists and scientists were freed from their usual topic of how the former can make the work of the latter understandable to the public, and scientists were able to talk across disciplines about how they can borrow imaging techniques from each other to use in interesting new ways. With an unusual context for the meeting, there was an unusual setting for new associations to be made.

Within the presentations of the conference, context was often an important theme. Benoit Mandelbrot, the Yale mathematician for which the most famous fractal set is named, claimed that he dislikes legends for his images because having them "spoils the whole story." But Philip Campbell, editor of the journal *Nature*, stated his belief that some visualizations "do well with a caption." Different audience, different context — dif-

ferent approach.

Sally Duensing, a director at The Exploratorium in San Francisco, showed images of science museums from around the world to illustrate how the physical layout and design of a space provides the context for how people perceive it. The theme of The Exploratorium: perception itself.

And Cindy Faber-Smith, design director for the journal *Science*, even began to explain how the context in which we perceive ourselves can influence what we believe we're capable of. She said that scientists call her daily regarding their images for the magazine, saying, "I'm not a creative person." Since they tend to be open to experimentation, she often gets them to iterate drawings from a scribble into a full illustration. This problem of self-limiting perception, she explained, begins when we share our drawings as kids and get asked, "What is this?" When what we draw begins to not look like what we want, we start believing that since we're not artists, we shouldn't be drawing. And our beliefs can be a pretty limiting context.

Susan Sontag, it turns out, fit into the conference perfectly. She was the educated intellectual who proudly professed scientific ignorance, a huge problem, as pointed out by Cornelia Dean, science editor for *The New York Times*. But she was also the perceptive critic, arguing for new images, new thinking, and more meaningful context than the "false pretense" of the panel discussion. At a gathering of preachers and the choir, she was the heretic. And that's the image whose meaning remains to be seen.

POLICE LOG

The following incidents were reported to the MIT Campus Police between May 11–31, 2001. This summary contains most incidents reported to Campus Police but does not include incidents such as medical shuttles, ambulance transfers, false alarms, and general service calls.

May 11: Bldg. E56, stolen computer, \$3,500; Bldg. E23, various items stolen, \$135; Bldg. E51, stolen laptop, backpack and other items, \$2,700; outside of Bldg. N52, assist Cambridge Police with an altercation. West Garage, motor cycle helmet stolen, \$280 and vandalism to motorcycles, Pacific Lot, suspicious individual.

May 12: Kresge Oval, suspicious activity.

May 13: Boston, 1) Sigma Phi Epsilon, noise complaint; 2) 518 Beacon Street, noise complaint; Bldg. 14, bicycle stolen, \$180; Cambridge, Phi Beta Epsilon, noise complaint; West Lot, report of a suspicious person, individual was gone on arrival of officers; McCormick Hall, loitering person sent on their way; Ashdown, person entered room and looked around while victim was in suite; Green Hall, vandalized motor vehicle; Student Center., bicycle stolen, \$140.

May 14: Bldg. E51, laptop stolen, \$3,570; Bldg. 35, vacuum stolen, \$298; Bldg. E52, audio visual equipment stolen, \$50,000; Bldg. 1, laptop stolen, \$1,700; MacGregor, bicycle stolen, \$400; Bldg. 9, stolen computer, \$4,000; Student Center, jeans jacket stolen \$60; Bldg. W92, suspicious activity; Bldg. W31, suspicious activity; Bldg. W32, disturbance; Bldg. 26, suspicious person.

May 15: Bldg. NE43, stolen bicycle valued at \$600; Bldg. 36, small fire in trash barrel; Bldg. 54, suspicious activity; Bldg. E15, suspicious person.

May 16: Kresge auditorium, suspicious activity; Bldg E15, stolen digital camera, \$456; Student Center, tools stolen approximately \$2,100 worth; Edgerton House, stolen bicycle, \$150; Westgate Lot, car broken into and attempted larceny of same, Amherst St., vehicle plate stolen.

May 17: Bldg. W13, noise complaint; Bldg. 10, 1) suspicious activity; 2) hack of a banner across roof; Kresge Lot, attendants' booth window broken; Chapel moat hack, a sailboat and shark were in moat; Bldg. 32, suspicious activity; Bldg. 37, suspicious person; Bldg. E52, bicycle stolen, \$400; Edgerton House, report of homeless person; Purrington Street, report of two homeless people; Stata Center, suspicious activity; Pacific Lot, syringes found.

May 18: Bldg. 35, suspicious activity; Brookline, Zeta Beta Tau, noise complaint; Boston, Delta Upsilon, noise complaint; Sloan Lot, hubcap stolen; Random Hall, suspicious activity.

May 19: Sailing Pavilion, wallet containing credit cards stolen; New House, annoying phone calls; Hayward Lot, male taken into custody on an outstanding warrant; two other males arrested for trespassing; Purrington Street, individuals issued trespass warning.

May 20: Ashdown House, noise complaint; Westgate Lot, car stereo stolen \$300, larceny; Student Center, \$300 cash stolen; Albany lot, two-way radio stolen from swap fest; Bldg. 50, suspicious individuals; Bldg. NW61, report of two homeless people.

May 21: Student Center, 1) suspicious activity; 2) stolen wallet, \$10; 3) backpack stolen \$300; 3) stolen backpack; Bldg. 13, suspicious person; Stata Center, suspicious activity; Bldg. 54, breaking and entering; Bldg. E40, stolen bicycle, \$500; Audrey Street, '90 Toyota stolen later recovered in Boston; Bldg. E17, vacuum stolen, \$296; Westgate lot, vehicle broken into and stereo stolen.

May 22: Bldg. NW61, suspicious activity; Bldg. 10, hack — sign put on dome; West Garage, motorcycle helmet stolen, \$150; Bldg. 7, stolen wallet, \$50.

May 23: Bldg. 64, suspicious activity; Bldg. W32, 1) jacket stolen, \$60; 2) jacket, wallet and watch stolen \$220; Bldg. 18, suspicious person; Bldg. W32, larceny.

May 24: Boston, Lambda Chi Alpha, Boston Fire Department requests residents playing with fire extinguishers cease activity; McCormick, report of annoying phone calls; Westgate Lot, CD/stereo player stolen \$200; Bldg. W32, \$150 cash stolen; Bldg. NW16, suspicious person; Bldg. 9, \$85 bike stolen.

May 25: McCormick, stolen box of t-shirts, \$550; East Garage, suspicious activity; Student Center, suspicious person; Bldg. 18, laptop stolen \$2,600;

May 26: Cambridge, Theta Delta Chi, noise complaint; Baker, malicious destruction of property; Student Center, purse stolen, \$500; Random Hall, Clifford Bonvie arrested for possession of narcotics.

May 27: Bldg. E55, suspicious activity; Pacific Annex Lot, suspicious activity.

May 28: Student Center, bike bag stolen \$30, larceny; Bldg. E56, suspicious activity.

May 29: Boston, Delta Upsilon, noise complaint; Student Center, larceny; Bldg. 13, person sleeping in basement; Bldg. 18, plywood stolen, \$960 and past larceny of plywood valued at \$1,500; Albany Garage, suspicious person; Bldg. E52, suspicious activity; Bldg. 14, stolen bicycle, \$950; Bldg. E20, refrigerator and insulation stolen \$350.

May 30: Bldg. 1, suspicious activity; Bldg. 10, malicious destruction of property; Bldg. W51, larceny of jewelry, \$700.

May 31: Bldg. E17, suspicious person; Bldg. NW61, hypodermic needles found.



congratulates

Gregory Kuhnen and Camelia Turcu

Căsătoriiile
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în cer.



Camelia Mariana Turcu '01 and former *Tech* photography editor Gregory Farrell Kuhnen '01 married amongst friends and family at the North Congregational Church in Woburn, Mass., June 16.

GABOR CSANYI—THE TECH

SPORTS

Revolution Fall to Wizards, Break Unbeaten Streak

By Ming-Tai Huh
CONTRIBUTING EDITOR

The visiting Kansas City Wizards snapped the New England Revolution's five-game unbeaten streak with a 2-1 victory at Foxboro Stadium last Saturday, July 7.

Midfielder Chris Brown scored in the 91st minute to put the Wizards safely up 2-0 with only four minutes left. Revolution's Jay Heaps slid between the goal and Brown on the breakaway. Charging out of the net, Revs goalkeeper Jose Fernandez confronted Brown with a dive on the right side of the goal box. Brown fell to the ground from the Heap's tackle at the place of the loose bouncing ball. Fernandez, out of reach and outside the net, gave way for Brown to push the ball into the empty net.

Revs captain and defender Mauricio Wright had no intention of being shut out by the Wizards. The Costa Rican native moved up to forward and scored just two minutes after Brown's garbage goal to make the score 2-1. Revs midfielder Johnny Torres, substituted for Shaker Asad in the 80th minute, played the ball to Wright nine yards out on the right side of the Wizards' net. Wright wasted no time and one-timed the ball to left side of Wizards' goalkeeper Bo Oshoniyi.

"The ball is not bouncing our way," said Revolution coach Fernando Clavijo (4-8-4). "The defense played well, nothing to do with the goals." The game ended with a loss for the Revs, but Coach Clavijo was not upset. "We did extremely well as a team, except for putting the ball in the back of the net," said Clavijo.

Wizards score first

Wizards' Chris Klein scored in the 66th minute for his second goal of the season. The unmarked St. Louis native received a pass from double-guarded forward Gary Glasgow on the right side of the Revolution's goal box. Klein beat Revs goalkeeper Fernandez one-on-one with a shot over the head of the kneeling Bolivian.

Kansas City coach Bob Gansler was very pleasant about the win, especially coming back from an embarrassing 7-0 loss to Chicago last week. "It was good that we got back in the saddle here." Gansler commented on Brown's goal from the ground, "It's the way the ball rolls." The Wizards (7-9-1) will face the Dallas Burn next Saturday back at home at Arrowhead Stadium.

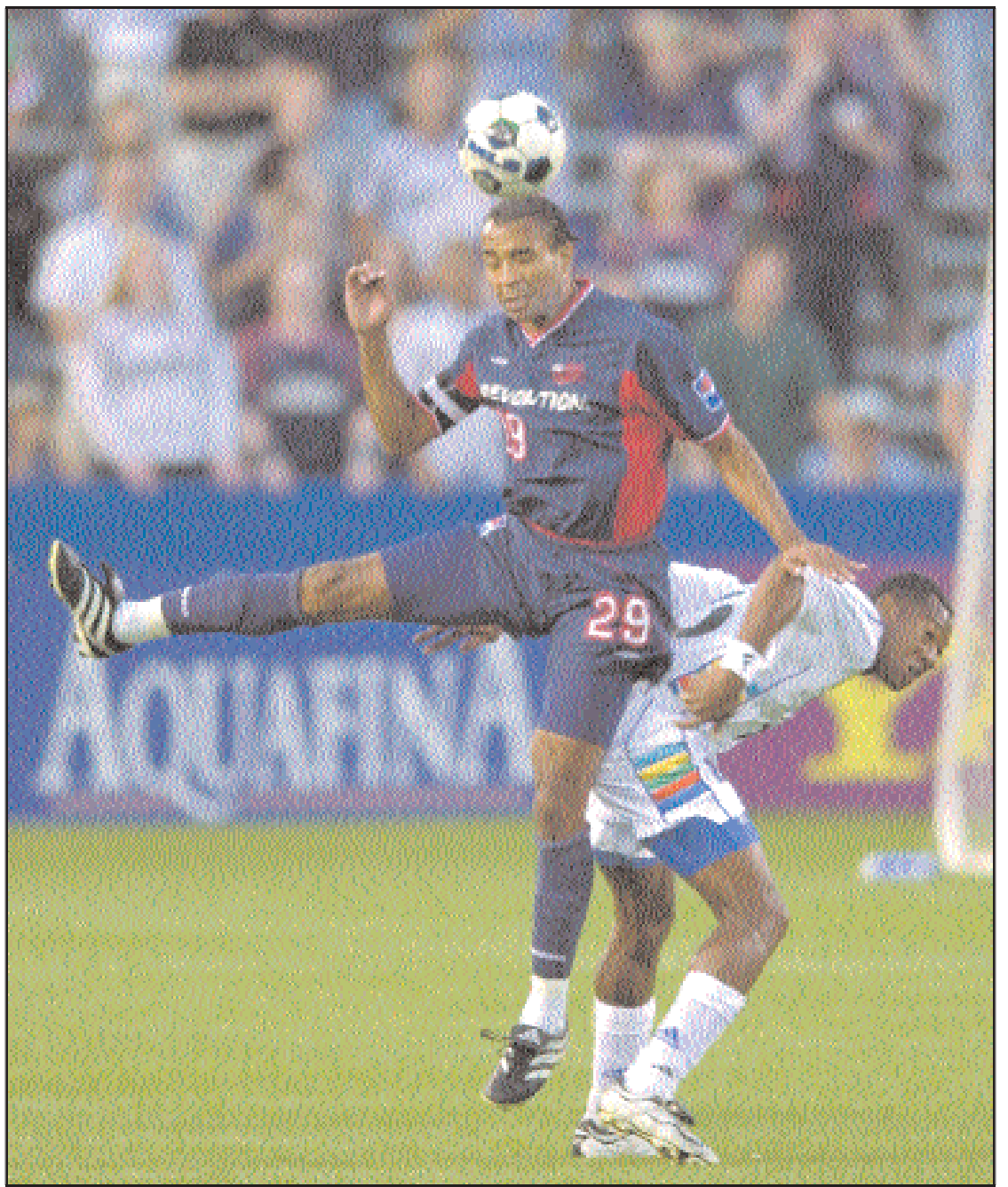
Revolution 0-1 on homestand

The Revs are 3-2-2 at Foxboro Stadium and 1-6-2 on the road. The loss to the Wizards starts a three-game homestand on a slow note. Next Saturday's game is against the D.C. United (5-10-1), who are coming into Foxboro with a two-game losing streak.

"Gato" Fernandez making stops

The Revolution added Jose Carlos "Gato" Fernandez of Bolivia to their roster on June 27. Since Juer-gen Sommer ruptured his left achilles tendon, the Revolution have been looking to deepen their goalkeeper position. Fernandez last played with Cordoba of Spain before coming to MLS. The Bolivian goalkeeper made his starting debut against Dallas on July 4 in a 1-1 tie, making 9 saves. Fernandez added 8 saves to his total against Kansas City.

'The ball is not bouncing our way.'
—Revolution coach
Fernando Clavijo



New England Revolution defender Mauricio Wright jumps over Kansas City Wizards forward Roy Lassiter for a header on Saturday, July 7.

Hispanic Heritage Night at Foxboro Stadium

The New England Revolution announced July 9 that it will host the team's first-ever Hispanic Heritage Night on Tuesday, July 17 when the Revs take on the Los Angeles Galaxy at 7:30 p.m. at Foxboro Stadium.

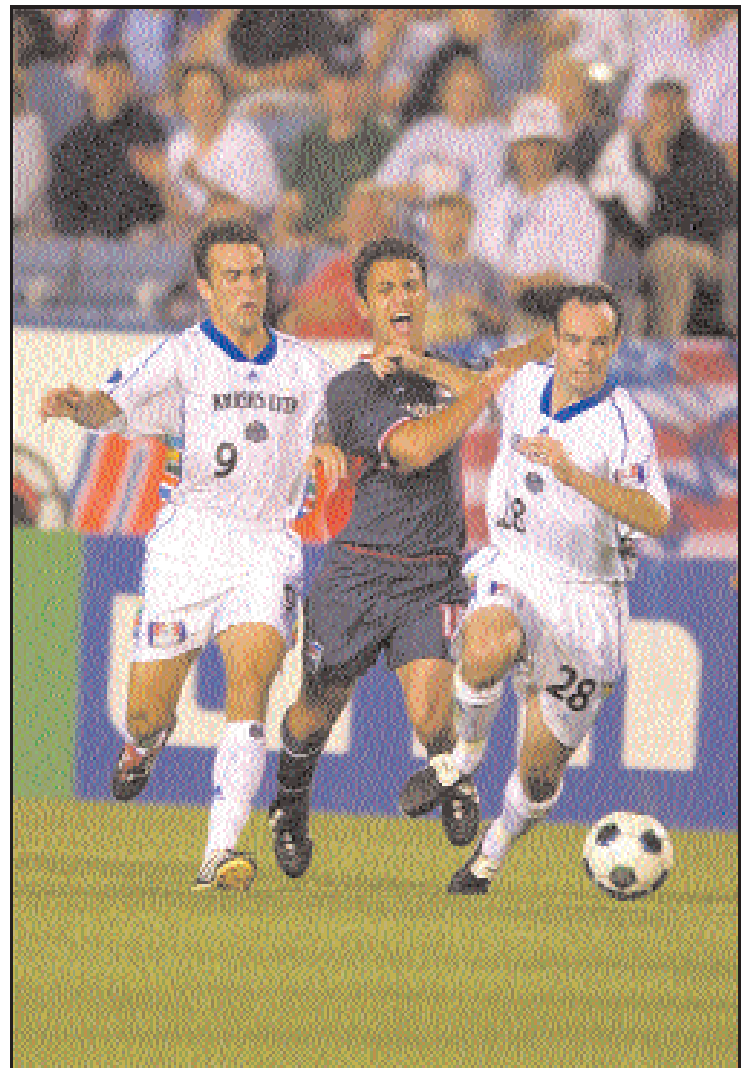
The Revolution will help celebrate the diversity and culture of the New England Hispanic community with an evening full of events. Fifty local Latino community members will be honored with a half-time presentation as well as a pre-game reception.

The Revs Soccer Celebration area will open two hours prior to kick-off as Latino music groups "Centro Latino de Chelsea," the "Colombian American Cultural Society," the "Tango Society of Boston," and "Mistura de Raza" will perform.

Hispanic Heritage Night will feature vocalist Veronica Robles singing the National Anthem and a Youth Recognition Ceremony before kickoff. Fans will be able to enjoy Latino food and Spanish announcements before and during the match.

Complimentary Soccer Video

Fans attending Hispanic Heritage Night will receive a free MLS "Golazo," a video highlight tape of Hispanic MLS players.



Kansas City Wizards Kerry Zavagnin, left, and Mike Burns, right, battle the New England Revolution's Shaker Asad, center, for the ball on Saturday, July 7.

New England Revolution goalkeeper Jose 'Gato' Fernandez punts the ball during Saturday's game against the Kansas City Wizards on July 7.