

UA forum questions role of the humanities at MIT

By Andy Fish

"The real question that is confronting MIT at the moment is the role of humanities," said Associate Provost S. Jay Keyser Thursday night at a forum examining humanities at MIT.

Approximately 40 students and faculty attended the Undergraduate Association-sponsored forum, which was held at East Campus.

People in engineering are worried that students are not ready for positions of leadership, according to Keyser. "I don't like the idea of leaders," he said. "The notion of training leaders worries me."

MIT students "do not have ap-

preciation for the social, political and economic impact of their tools," Keyser said. MIT should develop some method of education to create "a serious discussion of these issues," he continued.

Keyser cited three examples of science getting out of hand: the large number of infections occurring in hospitals, acid rain and the displacement of the job force by robots. "We can't see further than the front of our face," he said.

Mark A. Curtiss '87, undergraduate representative on the Humanities, Arts, and Social Sciences (HASS) Committee, said the current committee was

formed because of the reports of two committees which looked at the HASS requirement. The charge of the committee is to develop a specific program to replace the HASS requirement, he said.

Pauline R. Maier, chairman of the HASS Committee, said "students were taking so many different things they had nothing to talk about."

MIT students are becoming too narrow, Keyser added. MIT's "education does not provide the type of social training needed," he said.

"We're trying to define what an MIT student should get," Curtiss said. The HASS committee is considering five categories of hu-
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Tech photo by Ronald E. Becker

Prof. S. Jay Keyser talks to students Thursday at a Undergraduate Association sponsored forum on humanities.

DOE to use tax files in final decisions

By Harold A. Stern

The Office of Management and Budget is preparing a proposal that would give federal agencies the authority to access Internal Revenue Service (IRS) records, according to the *Chronicle of Higher Education*. The confidential tax information would be used to verify financial statements on applications for financial aid.

The proposal, introduced by the Reagan Administration, would override 1976 legislation that forbids federal agencies from using IRS records for purposes of education and financial aid. The proposal requires that the IRS report "their records on grant, loan, and other programs, would have access to applicants' unearned income, such as dividends and interest on savings."

Federal agencies are already authorized to use IRS records in the cases of students who default on college loans, according to *The Chronicle of Higher Education*.

Department may withhold the tax returns of nearly one million people this year unless they repay their loans. Eligibility for Medicaid and food stamps also utilizes IRS income information to verify eligibility.

Sen. Robert Stafford (R-VT), chair of the subcommittee dealing with student aid, "wouldn't have any major problem with the measure," said Polly E. Gault, spokeswoman in the Senate, in *The Chronicle*.

Sen. Dan Rostenbloom (D-Ill.) said, "The use of IRS records for educational purposes is a serious problem. It is wrong to use this information to determine the eligibility of students for financial aid."

Several members of Congress, however, questioned the new proposal. If the measure became law, there would be "significant privacy and due process and policy concerns that Congress should examine closely," Sen. William Cohen (D-Maine) said in *The Chronicle*.

GSC reviews activity policy

By Mary Condello and Harold A. Stern

The Graduate Student Council (GSC) will vote Thursday night on an amendment to the bylaws regulating GSC recognition of student activities. If approved, the proposal would refuse recognition to those organizations that have discriminatory membership policies.

Interested council members met two weeks ago to discuss the text of the proposal that would be presented. "Membership must be open to all members of the

MIT community," the approved version of the amendment reads, "although voting membership may be limited in order to preserve the identity of the group."

Activities must receive recognition either from the GSC or the Association of Student Activities (ASA), the organization with jurisdiction to recognize organizations with undergraduate members, in order to receive space in the Student Center or receive funding from the groups.

Thirteen GSC-recognized organizations limit membership to

members of a particular nationality, Nell said. They are all ethnic organizations — none are racially based, she added.

The groups, she continued, include: Tech Community Women, Club Latino, the Korean Graduate Student Association, the Pakistani Student Association, the African Student Association, the Japanese Student Association, the Friendship Association of Chinese Scholars and the Brazilian Students Association.

Julio Escobar G of Club Latino, Farzan A. Riza '87 of the Pakistani organization and Mottar A. Fall G of the African Students group, however, denied that their organization denies membership to anyone. Leaders of all other activities could not be reached for comment.

The GSC never had a formal policy concerning recognition and funding in the past, Nell said. "No written policy was applied," she explained, because "our previous budget was so small in previous years" that few groups applied for GSC funds.

One topic of debate concerned whether the GSC should recognize organizations that have discriminatory voting policies. The original text of the amendment, modeled on the ASA policy, would apparently not allow groups to limit voting for reasons other than attendance, paying of dues or related issues.

The GSC members present voted against this, on the grounds that it might be necessary for an activity to protect itself from takeover by outsiders.

The MIT Black Students' Union (BSU), for example, distinguishes between regular mem-
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Committee studies engineering plans

By Timothy Huang

Dean of Engineering Gerald L. Wilson '61 announced the formation of a commission to review the undergraduate engineering education program at MIT, according to chairman of the committee, Associate Dean of Engineering, Jack L. Kerrebrock.

"The commission was formed," he said, "because of the perception that we needed to reexamine undergraduate engineering along with the reviews of the School of Humanities and Social Sciences and the School of Science."

The Committee on the Humanities and Social Sciences, chaired by Professor Pauline R. Maier, and the School of Science Education Committee, chaired by Professor Robert J. Silbey, are currently reviewing the undergraduate programs in their respective schools.

Kerrebrock cited the importance of the undergraduate engineering program to the Institute as well as the need for periodic reappraisals to insure a common sense of purpose among the engi-

By Ben Stanger

Scientists and students from MIT, Harvard and Tufts said "No to 'Star Wars'" at a demonstration Saturday aimed at changing the course of President Reagan's summit with Soviet leader Mikhail S. Gorbachev in Geneva today.

Cabinet officials have recently counseled Reagan against sacrificing the "Star Wars" defensive research program at the summit.

Charlie Schueler, aide to Sen. John F. Kerry (D-Mass.), read a letter from the Senator to the protesters at the rally.

"There is little in his record to indicate that Ronald Reagan will seek any meaningful reduction in nuclear arsenals in next week's meeting with Mr. Gorbachev. . . . The eloquent pledge by scientists not to participate in Star Wars projects . . . should awaken this administration to the notion that the people of this country will not accept weapons in outer space," the letter stated.

Boston City Council member David Scondras said that MIT students should stand up for themselves and refuse to get involved in "Star Wars" research. "Don't accept a job doing research if it makes you sick. . . . Don't participate, and it won't happen."

The Strategic Defense Initiative (SDI) is destabilizing to the Reagan-Gorbachev summit because it will cause an escalation of the arms race, according to Gary Goldstein, associate professor of physics at Tufts.

To counter the 90 percent effectiveness of "Star Wars," the Soviet Union need only increase their missile stockpiles, Goldstein explained.

"It is not enough for college presidents to denounce and then allow SDI research on their campuses," he concluded.

Speakers consider SDI's impact on universities

Undergraduate Association President Bryan Moser '87 called

on the Institute to clarify its stance on SDI because of potential political manipulation of MIT.

Rich Cowan G outlined MIT's historical ties with the military, which have been strong since World War II. Cowan said over
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Tech photo by Sidhu Banerjee

Prof. Joseph Weizenbaum speaks at Saturday's SDI rally on the steps of the Student Center.

Erratum

The Tech mistakenly printed that the picture on the bottom of page 13 of the September 15 issue was of Prof. John Hildebidle. The picture was actually of Prof. Charles Stewart.

Bernard Feld on the responsibility of a scientist

By Katie Schwarz

Interview

Bernard T. Feld, professor of Physics, left graduate school at Columbia University to join the Manhattan Project and help develop the atomic bomb. Since the conclusion of World War II, he has been an MIT faculty member, researching elementary particle theory. He has been chairman of the Executive Council of Pugwash, an international group of scientists formed in 1957 in response to the Russell-Einstein Manifesto, which called for scientists to join together to deal with the problems they had created — most importantly, nuclear weapons and arms control. He has also been editor in chief of the Bulletin of the Atomic Scientists.

Q: What do you see yourself as having accomplished with the Bulletin?

A: The *Bulletin* . . . [is] not a technical journal. The subtitle is "a journal of science and public affairs" . . . It tries to explore the implications of different kinds of scientific developments for political, social, economic issues. We seek out and interview the academic community for new ideas, mainly on the issue of how to control nuclear arms. Beyond that, we recognize that there are a lot of important issues in the area of stability. For example, in the developing world there are serious questions which will determine whether or not war will break out in the future, and so we've taken considerable interest in problems of the uses of science and technology for development in the Third World.

Q: I have this interview which you did with Link in 1981. You mention that Student Pugwash was just being set up. So now it has been set up. What has it been doing?

A: Student Pugwash has pressed for a rallying ground on the issue of scientific responsibility. . . . I attended two meetings just in the last six months: one of the Canadian Student Pugwash group, and one of the US Student Pugwash group. I told the group that these issues are not going to go away with my generation. They're here to stay, and it's important that the younger generation of scientists, scholars, researchers and people in general understand these issues, and understand the steps [that are] necessary to take to ensure that in fact nuclear weapons will not be used.

"[The military's] attitude can be symbolized by the cliché 'Scientists should be on tap and not on top.' Most of us feel that that's totally irresponsible and something that we can't accept."

Q: What do the students learn by having these meetings?

A: First of all, they clarify their own points of view . . . and then they get some idea of what kind of [political] action is possible. They now have an office in Washington, which tries to exert direct influence on the Congress with respect to some of these issues, issues concerning the development of new types of weapons, the deployment of new types of weapons, the MX issue, the development of new types of chemical weapons and things of this kind. And it's very important that the generation of people who are going to be primarily responsible for these things in a few years should think about and understand what the issues are. The main concern is that in fact no matter what our differences with the Soviet Union are — and they're very serious differences, ideological and political — nevertheless, we have one overriding common need. And that is to be sure that nuclear war does not break out.

Q: There's a stereotype of the role of a scientist in society, which is that scientists and engineers are only technicians — they supply the means and others supply the ends. What do you think of that stereotype?

A: That's a stereotype which, of course, certain groups would like to maintain, most particularly the military. Their attitude can be symbolized by the cliché "Scientists should be on tap and not on top." Most of us feel that that's totally irresponsible and something that we can't accept. It may be that the distance between the result of some basic research process and the final application is appreciably long, so that one loses control over the final product. Nevertheless, there is a responsibility of the scientist to raise the level of awareness about the implications of a new scientific discovery . . . at the earliest possible time, so as to give the process sufficient time to consider what could be done to keep possible harmful applications under control.

"I know few scientists who say that the responsibility of scientists is only to science."

Q: To whom should these questions be raised?

A: At the first level . . . the scientific community [should] be made constantly aware of these issues, so that there is some basis for unified approach. Then at the political level, it is important that our political leaders understand, insofar as they can, what the implications of some of these things are, in particular, what the implications of political decisions are with respect to these issues. And finally, of course, the public has got to understand, because it's the public, in the final analysis, that makes these decisions.

Q: So you think that this kind of spreading awareness is a basic responsibility, a part of being a scientist?

A: I think so. I think it should be part of the ethos of being a scientist. Not that you spend all your time on it, especially for a fairly young scientist in the most productive years. There's an instinct, and it's a good instinct, to get in there and do important and impressive science. Nevertheless, one should always keep in the back of one's mind that there are possible implications, and if one sees [them], one has the responsibility to make them known.

Q: How many scientists do you think share your views?

A: I don't know that I can quantify it. But I know few scientists who say that the responsibility of scientists is only to science. That's a way of thinking which I think has almost disappeared.



Q: Do you think that scientists' attitude toward their public responsibility has changed during your lifetime?

A: I believe that the awareness of this responsibility is growing in the scientific community, thanks in part to some of the things that [Reagan's] administration is doing. The introduction of the stupid "Star Wars" nonsense has raised a great reaction in the scientific community, a realization that this is a very dangerous thing, because the first Soviet reaction to any indication that we might be trying to build up a defense is the very simple one: any defense can be overcome by a large number of offensive forces. And it's much cheaper to increase offenses than to build these sophisticated and complicated — and imperfect — defensive systems. And most scientists agree on that. But somehow or other, the people in the administration have got this crazy vision that they're going to build a shield that eventually is going to render us completely impervious to nuclear missiles.

Q: How much of a voice does the scientific community have in comparison to, say, the Pentagon, and to lobbies?

A: Unfortunately, when it comes to lobbying, money counts. Just the budget of the Pentagon public relations office is appreciably larger than the entire budget of the Arms Control and Disarmament Agency. This gives you an idea of the priorities that we're setting in this administration.

"MIT students should start to recognize . . . that there are moral and ethical and social issues involved in the practice of the profession of scientist or engineer."

Q: Victor Weisskopf has said that there's a supranational character to physics. Do you think there's a meaning to that?

A: There is a supranational character in the sense that scientists are accustomed to speaking to each other across boundaries and not paying attention to national boundaries when it comes to scientific work. . . . At an international conference, when one talks to one's colleagues, one doesn't ask what country they're from. It's as easy to talk to a Russian colleague about the latest developments in nuclear and particle physics as it is to talk to an American colleague. You have a head start, you already have this network of scientific communication. It's important if you think of ways of using this network to further the communication concerning the necessity of both sides acting sensibly to avoid nuclear confrontation.

Q: Recently it looks like the Defense Department would like to use the prestige of institutions like MIT to help sell the Strategic Defense Initiative. How is that going to affect the relationship between universities and government?

A: I think at the moment it's building up severe strains, and I hope that the American academic community will continue to resist this waving of large sums of money in front of their noses. Other sources of research funds will be slowly drying up. . . . Now, if you're looking for research funds, the place to look is the SDI office. And I think this is a blatant attempt on the part of the administration to buy the scientific community. They're giving money for basic research. But once you get hooked on this kind of thing, once you want a renewal of it, they say "We'd like a little favor, we just need a little research on this thing. It's not a big deal, is it?" It's the wrong way. And I think it's a mistake. I think we should resist it.

Q: In Paul Gray's commencement charge to the graduates he said that MIT should not be interpreted as supporting anything as an institution. Do you think that goes far enough?

A: I think it's a step in the right direction. The president of a large institution like MIT has to choose his words fairly carefully. So far I think Gray has adopted a very reasonable approach to these sorts of things and I think it will continue.

Q: In the Chronicle of Higher Education there is an article saying that at the University of Illinois a colonel sent a memo out saying he wanted to discontinue projects with researchers who said they were going to refuse to conduct SDI research — later on it turned out he didn't really have the authority to do that. Are we going to see more of those kinds of strains?

A: I think those attacks are going to go on. We have to be very alert to them. The academic community should adopt a united front, resisting that kind of attempt at intimidation. We've seen it before, it happens all the time — attempts by the administration to get academic people to refuse to talk to colleagues from East European countries about completely unclassified matter. And the answer to this should be, bluntly, "Go to hell." Science is science, and we don't recognize those kinds of intimidations and we refuse to accept it. If it means that we lose some money in the process, so be it.

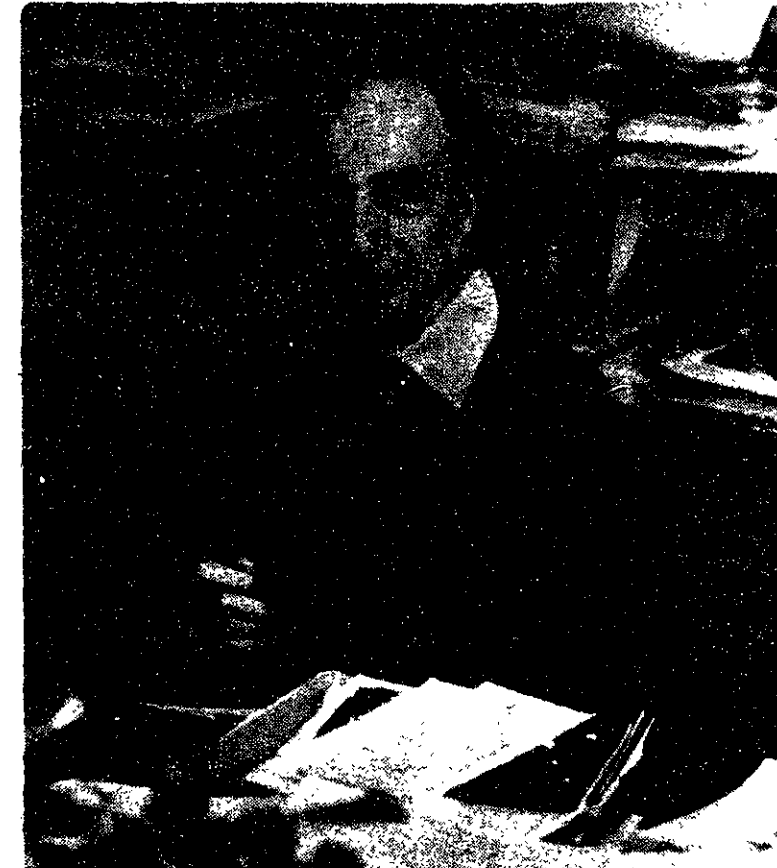
"I think we need to have a divorce between the academic and the military. The military has got its laboratories, and that's fine . . . But I think the universities should stop."

Q: How much of a united front is possible? How many people will join in?

A: It's a matter of, I think, a sort of a general feeling. If most of your peers take this attitude it's much easier for everybody. There will always be a few people calling themselves pragmatists. I will maybe agree that the Russians are the evil empire and we have to resist it. But on the whole the community in general adopts this approach. Academic openness is a vital aspect of the academic process and once we start to lose this, we lose a great deal. It can be irreversible.

Q: In terms of the responsibility of a student, what do you think a student, for example an MIT student, should be doing?

A: The first thing an MIT student should be doing is preparing him or herself to become a first-class scientist or engineer. But at the same time, I think MIT students should start to recognize, as they are, that there are moral and ethical and social issues involved in the practice of the profession of scientist or engineer, and that at least they should become aware of the problems.



Q: Do you think the so-called split between the two cultures, the scientist and the humanist, is an obstacle to scientists' having an influence on public policy?

A: I don't think so. I don't believe that this split is of meaning to science. I think in many respects it's artificial. I don't think that humanists can't understand enough about science and scientific issues to feel at least at home in these kinds of discussions. You don't have to be a technician, you don't have to understand how nuclear weapons work, to have some idea of what the consequences of a nuclear war would be.

Q: Do you have any thoughts about the committee on military funding at MIT?

A: I think that universities have got to break the habit, because it's so easy to get into the habit of taking money when it's easily given without asking too many questions, especially when there are no strings attached. But you know that in the future there are these hidden strings, that eventually you're going to have to pay a price. So I think that the direction in which Professor Kistiakowsky is moving is a very important one. I think we need to have a divorce between the academic and the military. The military has got its laboratories, and that's fine . . . But I think the universities should stop.

Tech photo by Clark Golestan

opinion

Column/Thomas T. Huang

Close your eyes: dream all is well

It's light outside. I have worked all night, and, caught between the transition from darkness to morning gray, I fall into a light-headed trance, a kind of exhaustion. I stare at the problem set.

At 11 am, the radio is on. Out the window, sparrows catch my eye. The station is playing "We Are The World," and I switch to another station, but the song remains. I turn the dial again.

At first, I think I've gone crazy. All the stations are playing the song at the same time. I sit down on my bed to listen. It should be an emotional moment, but I just sit there. I hear the song over and over again.

Later, stepping into the shower, I think the water can revive me. I hope the water can restore my sanity.

In Raymond Carver's short story, "So Much Water So Close to Home," the narrator is deeply disturbed when she learns that her husband has, on a hunting trip, discovered a girl floating in a creek. The husband and his buddies had for some reason chosen to complete their 3-day hunting trip before reporting the body to the local sheriff.

The narrator at first suspects that her husband and his friends raped and murdered the girl. Then she realizes that her husband's inaction was in itself a crime. This inaction, this inability to react as human beings, is destroying their lives. She says:

I look at the creek. I float toward the pond, eyes open, face down, staring at the rocks and moss on the creek bottom until I am carried into the lake where I am pushed by the breeze. . . .

Two things are certain: 1) people no longer care what happens to other people; and 2) nothing makes any real difference any longer. Look at what has happened. Yet nothing will change. . . . We will grow older, both of us, you can see it in our faces already, in the bathroom mirror. . . . And certain things around us will change, become easier or harder, one thing or the other, but nothing will ever really be any different. . . . We have made our decisions, our lives have been set in motion, and they will go on and on until they stop.

But if that is true, then

what? I mean, what if you believe that, but you keep it covered up, until one day something happens that should change something, but then you see nothing is going to change after all. What then? Meanwhile, the people around you continue to talk and act as if you were the same person as yesterday, or last night, or five minutes before, but you are really undergoing a crisis, your heart feels damaged. . . .

A boy in my high school drowned during the senior class trip to the Lake of the Ozarks. I didn't know him well, but others did. A lot of people loved him.

A bleary-eyed girl passed me in the hall, but I couldn't meet her stare. In the school's attic, a student quietly told everyone what had happened. Later, the victim's brother slammed his fist into a stop sign. I couldn't help but think about my own brother and sisters, and I knew that was cruel, that was selfish. I slammed my locker shut.

I wanted to tear the door off its hinges.

In the shower, the hot water strikes my body. The water blinds me. I let it run down my soaked hair, into my eyes. My hands cover my face. I let the water beat me down, because I am a coward, hiding.

I wished I could have saved him.

We all wish we could save the starving people in Africa. But we seem to float helplessly, tugged by events we can't control, in directions not of our choice.

I cry in the shower as the water bombards me. As I leave, my feet touch the cold tile, and I shiver, wrapping my bathrobe around me. The cloth is like a thin, momentary sanity.

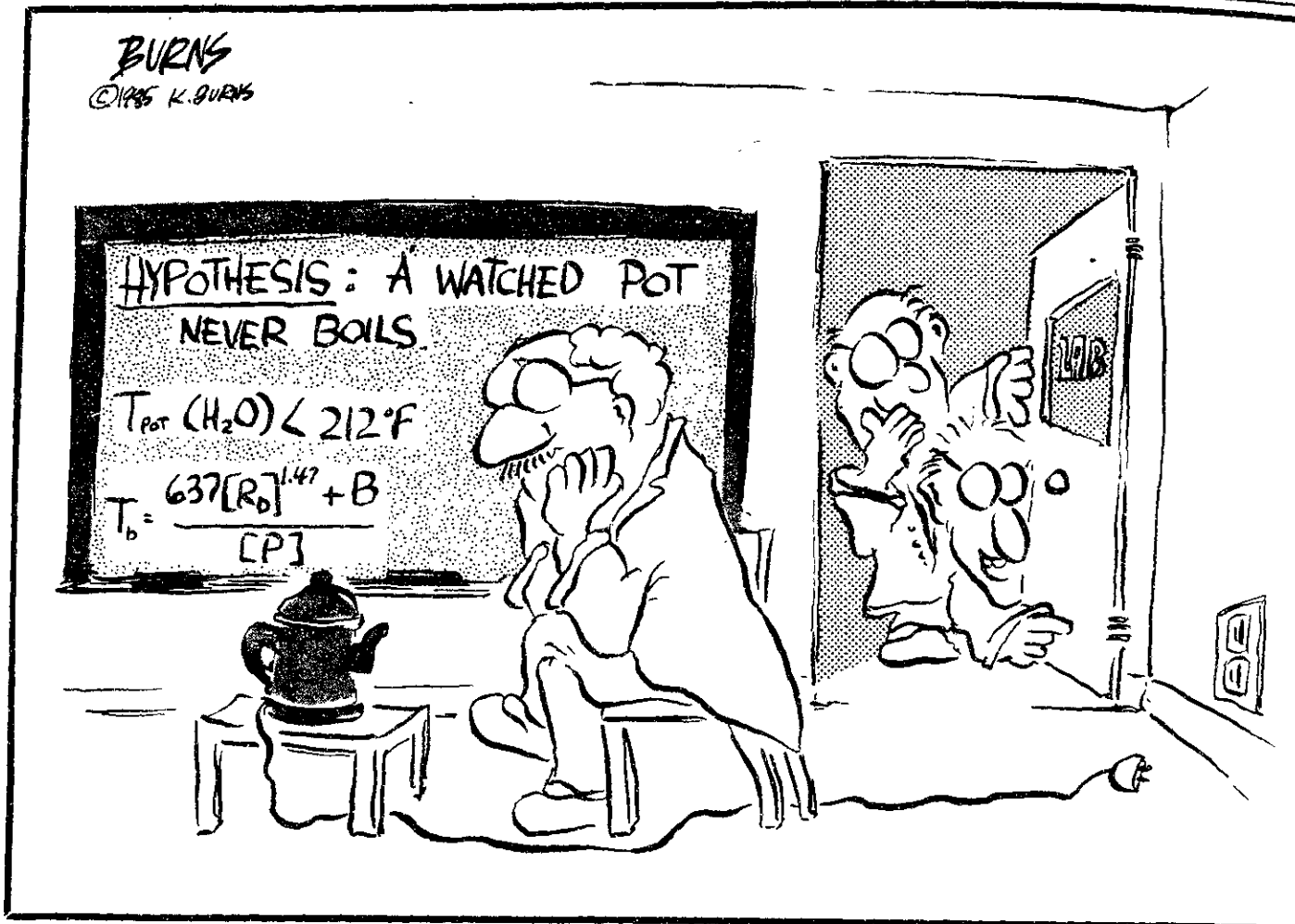
There is so much water so close to home. There is so very little in Ethiopia.

When you're hurting, when you're exhausted, go to a pool and swim in the deep, cool water. Float on your back and relax.

You're safe, back in the mother's womb.

Water purifies you. You come out a new person. You leave your pains and worries in the water, like a snake leaves its skin. You feel clean. The water gently caresses your skin, a lover.

Close your eyes and dream. Dream that everything's all right, that everyone's been forgiven.



Guest Column/Brian F. Aull

A holistic approach to peace

Today President Reagan and Soviet Leader Gorbachev will meet for summit talks in Geneva. Their topic will be ending the arms race. A casual glance at the state of the world does not engender very much optimism about their chances of success, let alone about the possibility of peace in a broader sense of the word. But perhaps this statement reflects an attempt to put the cart before the horse. Might there not be a more holistic approach to international peacemaking which would produce disarmament as a natural byproduct? I would like to share some personal reflections on what elements such an approach might encompass, in the hope that it will stimulate optimistic and constructive thinking, and more importantly, action.

First, the approach to this problem depends crucially on one's view of human nature, and therefore, one's view of history. If man is regarded as merely a very cerebral beast, smart enough to invent weapons, but too selfish and aggressive to construct a pluralistic yet harmonious society, the rest of my opinions can be discarded. But the urgency of our problems forces us to seriously question such a cynical view, because it paralyzes our will to act constructively. I propose that we consider the implications of the opposite view: that humans have a "higher" nature, and that they seek communion with the ultimate Essence (though, as National Lampoon joked, perceptions of that Essence range from "hairy thunderer" to "cosmic muffin.") This is important because it inspires love, motivates people to make sacrifices for their fellow humans, and provides a focus of purpose which transcends the self-centered vested interests which divide us. (I am also assuming that truly communing with the Essence precludes fighting over perceptions of it.)

The view of history which accompanies this is also positive. Humanity has achieved progressively larger cohesive social units during the course of history. Families have merged into tribes, tribes into city-states, and city-states into nations. The fact that conquest or violent upheaval played a role in many of these transitions does not negate the fact that, at some point, larger social units stabilized in which the unity was genuine and voluntary, not maintained by fear and domination. Human beings can

construct a pluralistic and harmonious planetary civilization. Not only is this a reasonable extrapolation from history, it is the unavoidable next step in the cultural evolution of our species. But that does not mean it is trivial; like the previous transitions, it will involve (and is already involving) tremendous upheavals and growing pains.

Many concrete developments in the 20th century should give us hope. The emergence of the first organizations resembling world governments, the League of Nations, the United Nations, and the World Court, should be regarded as historic steps in the right direction. Despite their imperfections, these bodies might be compared to the first clumsy steps a baby takes when it learns to walk. The ties of transportation, communication, and commerce have shrunk the planet into a spherical village. This is not an idealistic notion; it is a reality right now. Worldwide peace movements and international projects in the fields of education, science, and socio-economic development which would have been inconceivable a century ago are now commonplace. The American outcry against apartheid, an internal policy of a

country on the other side of the globe, is a clear example of our growing awareness of the planet as a whole.

I have presented the view that humans are capable of both spiritual and cultural advancement, and that hopeful signs exist that the next phase, a planetary civilization, is achievable. But there are many barriers still to be overcome which deserve special attention. Generally, world peace is not solely the spontaneous product of certain individuals cementing a relationship with the Essence and achieving inner peace; nor is it solely the outcome of political action, legislation, and treaties. A balanced approach encompassing both of these elements is required at all levels of society from the grass roots on up to presidents and kings. The inner peace is a necessary building block because it motivates altruistic behavior. But mutual consultation is also necessary in order to channel and coordinate the efforts of individuals to solve social problems which create a climate of war. In addition, a value system appropriate for a planetary civilization must become ingrained. This includes several elements:

1. The curtailment of unlimited

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feedback

Work toward peace, oppose Star Wars

To the Editor:

On September 23, 1985, a day before he was hospitalized, my husband prepared the following message to his colleagues at MIT, faculty, staff, and students:

Dear Colleagues:

We at MIT are considered to be in the lead of technological thought and strategies, and our opinions are given much weight. A crucial present issue is the Strategic Defense Initiative, better known as Star Wars. I am asking you to join me in not collaborating in that enterprise.

For the past two months I have been studying the topic, for example, as described in the spring and summer issues of *Daedalus* (which makes very good reading). I am convinced that Star Wars is counterproductive. Here are a few good reasons:

1. It will not work

- It is against ICBMs only, and does nothing *vis-a-vis* either cruise missiles or most other missiles that could be launched from submarines lurking near our coasts.
- Even against ICBMs, it fails in detail.
- It is necessary to catch most of the USSR missiles in their launch phase outside the atmosphere. That requires high-orbit sensors, plus either pop-up nuclear explosion x-ray laser counter-weapons and/or vast, delicate, low-orbit satellites continually travelling over USSR territory. All this can be defeated either by simple ASAT de-

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opinion

We can no longer remain isolationist

(Continued from page 4)

national sovereignty and fanatical patriotism. People must be taught to think of themselves primarily as world citizens, and secondarily as Americans, Japanese, or Ugandans. Nations must submit to a world body like the UN, but one which has binding authority as a federated world government. Just as 13 British colonies had an enlightened self-interest in giving up unlimited autonomy to create a federal government, the countries of the world now have a similar self-interest. We can create this world government by choice, or it can be forced on us by the fear of self-destruction. The United States might start setting a good example right now by abiding by the decisions of the World Court.

2. Increased interfaith collaboration. Religious fanaticism causes war. Members of different faiths would do well to regard the religions of man as stages in a progressive civilizing process, in which the Essence is manifested in different ways at different times. If this sort of synthesis is not possible, religionists should at least drop their theological differences and work together for peace and understanding. Better mutual understanding between Judeo-Christian peoples and Muslims is particularly crucial. Americans can work toward this goal right now by studying the history and teachings of Islam, rather than relying on prejudices and shallow stereotypes. A few fanatics no more reflect the true nature of Islam than the Spanish inquisition reflected the true nature of Christianity.

3. The elimination of racism. Children should be exposed to other children of diverse ethnic backgrounds from an early age, and thereby immunized against racial bigotry. Racism not only causes social injustices that lead to violence, but it also fosters the "us vs. them" attitude, which is incompatible with the spirit of world citizenship.

4. The equality of the sexes. The oppression of women not only creates an injustice and denies society the full benefits of the talents of women; it also hurts men. It promotes in men immature, selfish, and conquest-oriented attitudes, which in turn are reflected in governmental

policies and in international relations. Again, education from the cradle on can have a practical impact.

5. The elimination of extreme poverty and wealth. Economic injustice causes war. The creation of a world currency, and elimination of trade barriers would help to equalize the disparity between the "haves" and "have nots." The interdependence of capital and labor must be recognized, and businesses and industries should be based on a cooperative rather than an adversarial relationship between workers and management. Many American and Japanese firms have already moved in this direction.

6. Universal education. Ignorance is the foundation of prejudice, and I have already mentioned the crucial role of education in combating racism, sexism, and jingoism. As a part of the education of children, a universal auxiliary language should be taught in addition to the native tongue. This would facilitate universal communication and understanding. This training would be one element in a program to teach children skills and values which are necessary to live in a planetary society.

I do not wish to deny the importance of disarmament as a technical issue. The destructive power of our arsenals gives disarmament an urgency of its own. But we must also realize that the broader issues associated with peace will assert their urgency too. The ills and problems of our day are symptomatic of our own attempt to cling to outmoded values; these ills will worsen until we adapt our values to the reality of Village Earth. There is no going back to the secure, isolationist status quo. I submit that we must think of peace as a necessity, not a dream. Its achievement requires a commitment to deal with many different personal and social issues, some of which are not customarily associated with peace. I would urge individuals to think about these issues and then find practical ways of getting involved and helping out. No one person can save the world, but each person can take responsibility for a tiny piece of it. The MIT community is an international community, and presents many opportunities for constructive involvement.



feedback

Star Wars is destabilizing

(Continued from page 4)

vices that are much cheaper, and/or quick-burn launch vehicles.

- Destruction of warheads in mid-course can be made very difficult by simple active or passive decoys, chaff, etc.
- Terminal phase re-entering warheads overcome the defense if they have a little (even random) evasive motion or other cheap strategies, except when they are specifically targeted onto super-hardened sites (which lead some to think that Star Wars is really planned as a missile site protector, hence part of nuclear war-fighting, and not a people protector at all).
- The software difficulties seem almost beyond comprehension.

As a result of all this, Star Wars is destabilizing and will escalate the arms race.

2. Star Wars diverts critical resources.

- Resources and manpower are sorely needed

in many other sectors. Star Wars produces nothing that we can use to live better, or sell overseas. Many of our industries languish for lack of stimulus, attention and innovation. We work on a laser that might destroy a missile; our industrial competitors work on smarter personal computers, better cars, etc., and sell them to us. Meanwhile, we marvel at our trade deficit.

3. Star Wars is academically corrosive.

- As presently envisaged, the program treats very ambiguously the questions of classification and academic freedom.

The unfortunate fact is that the offense will maintain the technological initiative in this business; we must avoid war by other means, and Star Wars robs attention that should be paid to take other means. Therefore, it is bankrupt morally as well as technologically.

President Gray said at our 1985 graduation exercise that MIT will not be used corporately in support of Star Wars. That is a splendid statement. At our personal level, I feel that translates into not accepting support for or giving support to Star Wars.

I hope that you will join me in signing the following document and encouraging others to do likewise. Professors Vera Kistiakowsky (24-522) and James Melcher (38-377) are collecting the signed statements for the Schools of Science and Engineering.

David J. Rose
Professor of Nuclear
Engineering Emeritus

I hope that those who cherish his memory and have expressed admiration for his vision of a reconciled humanity, will sign the petition and take up the challenge of working even scientifically toward a more peace-making global society. When witness becomes part of scientific work, we may be able to build a better planet.

My profound thanks go to those who will heed David's appeal.

Renate Rose

(Editor's note: The text of the petition follows.)

We, the undersigned graduate students and research staff of the Massachusetts Institute of Technology's science and engineering departments, believe that the Strategic Defense Initiative (SDI) program (commonly known as Star Wars) is ill-conceived and dangerous. Anti-ballistic missile defense which is sufficiently effective and reliable to defend the population of the United States against a Soviet attack is not technically feasible. Efforts to develop a system of more limited capability will only induce a build-up of offensive missiles by the Soviet Union, jeopardize existing arms control agreements, stalemate current strategic negotiations and, consequently, accelerate the nuclear arms race and undermine international security.

Participation in SDI by individual MIT researchers would lend the University's name to a program of dubious scientific validity, and give legitimacy to this program at a time when the involvement of prestigious research institutions is being sought to increase Congressional support. Researchers who oppose the SDI program yet choose to participate should therefore recognize that this would contribute to the political acceptance of SDI.

The likelihood that SDI funding at MIT would restrict academic freedom and blur the distinction between classified and unclassified research is greater than for other sources of funding. SDI officials openly concede that any successful unclassified project may become classified. The structure of SDI research programs also makes it likely that MIT will be part of a Research Consortium with other universities and industries who will be doing classified research. Moreover, the potentially sensitive nature of the research may involve may invoke legal restrictions required by the Export Administration Act.

The SDI program and its political acceptance depend crucially on the participation of individual scientists and engineers at all levels of research. As one step towards halting this program, we pledge neither to accept SDI support nor work on projects funded by SDI, and encourage others to join us in this refusal. We hope together to persuade Congress and the public to support this deeply misguided and dangerous program.



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notices

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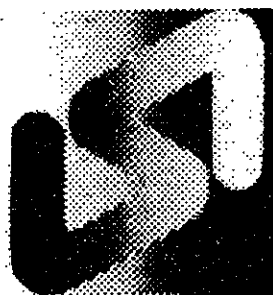
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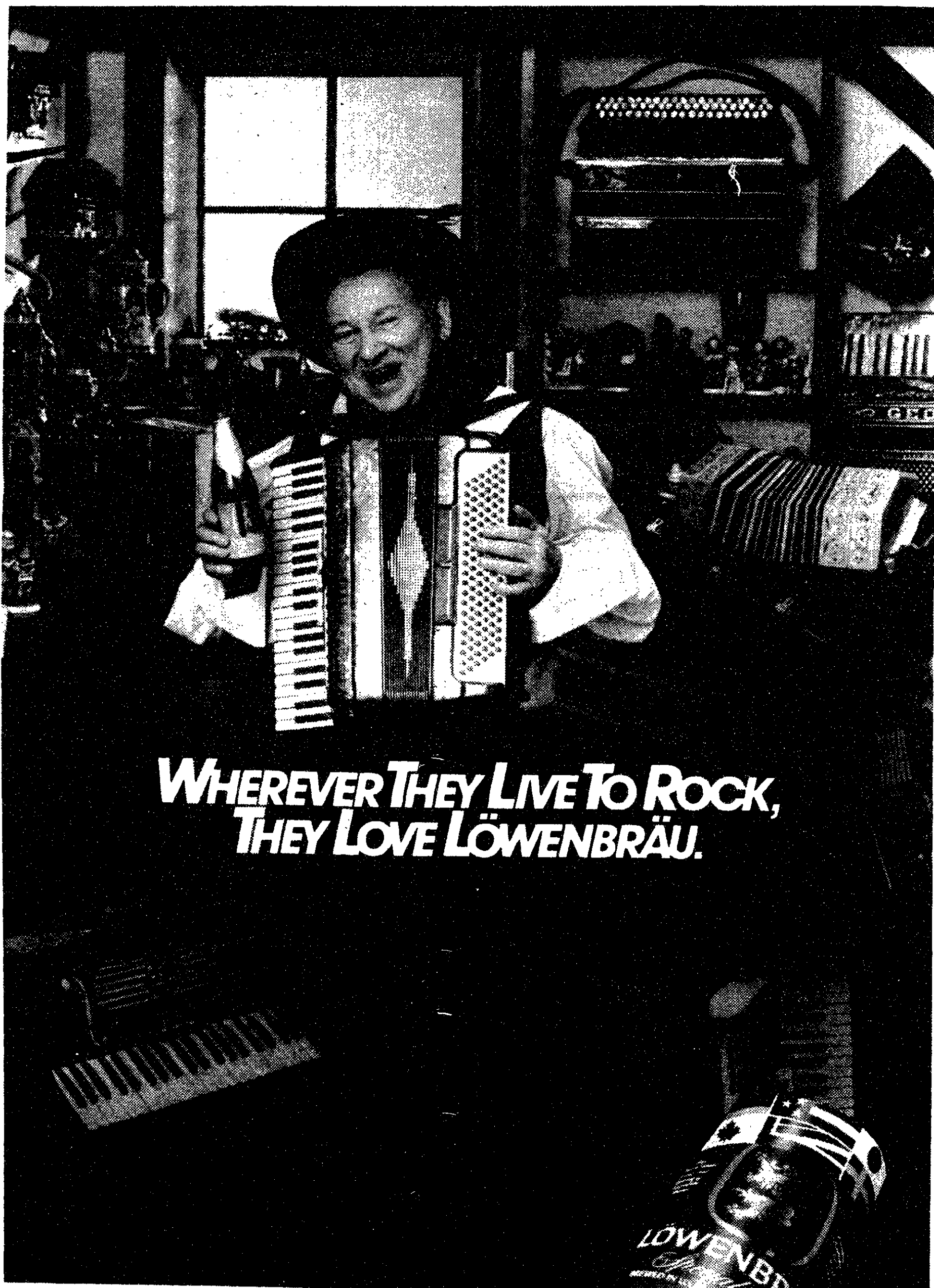
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Students discuss humanities

(Continued from page 1)
manities: cultural; historical; literature; context, such as science and society; and non-verbal — for example, dance. The categories are up for discussion, Curtiss said.

Many students at the forum were opposed to any humanities requirement. One student said he could have gone to a city college to take a Shakespeare course. Some students felt that the HASS requirement was contrary to their goal of getting a good engineering job.

Others argued that the HASS requirement would yield more

creative engineers. Several said humanities courses would be good preparation for management positions.

One student asserted students interested in management would go to schools like Harvard; MIT should worry about training engineers.

"MIT students, when left to themselves, take a course that is career-oriented," Keyser said. "Most took economics, a writing course and a foreign language."

Some students were against a humanities requirement because it restricted the courses they could take. A student said he was

advised not to take Spanish I because it was not a humanities distribution course (HUM-D). He wanted the option of taking the humanities he desired.

There is feeling that the HUM-D requirement is too broad, Curtiss said. Too many classes are HUM-Ds, he added.

Students should study "for the sheer delight of it," Keyser said. "When I went to college you never had to worry about getting a job. . . . You guys don't have that kind of freedom," he added.

The humanities requirement is a way to make better people, Maier added.

Engineering review begins

(Continued from page 1)
neering faculty as reasons for the review.

Wilson and Kerrebrock have appointed Professors Herman A. Haus '54, Lawrence M. Lidsky '62 and Borivoje Mikic '67 to the commission, which Kerrebrock will chair. Each of the professors on the commission will head a subgroup that will examine one of three areas of concern, Kerrebrock explained.

The first subgroup will review the Institute Core and its interface with the School's curriculum. The second subgroup will review issues internal to the School of Engineering. The third subgroup will consider such matters as the environment in the living groups and MIT's learning environment, according to a letter Wilson and Kerrebrock addressed to the faculty of the School of Engineering.

Kerrebrock said the groups will consider various issues including the possibility of adding engineering courses to the Institute Core and the possibility of a five-year engineering degree.

Questions of the undergraduate learning environment at MIT are of equal importance.

"There is a great deal of concern . . . that a significant fraction of students suffer from competition and do worse than they could based on their previous records," Kerrebrock said. "We want each and every student to realize his own full potential at the Institute."

"We need very badly student input," Kerrebrock said. "Each of the eight engineering departments will be responsible for get-

ting student opinions and fueling them into the commission."

The commission hopes to provide a statement of the goals of an engineering education by January, 1986 and to make recommendations concerning changes by May. The committees reviewing the School of Humanities and Social Sciences and the School of Science are also expected to report by May, 1986, according to Kerrebrock.

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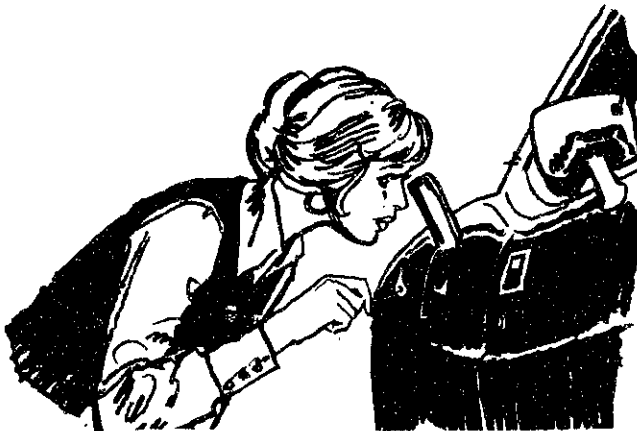
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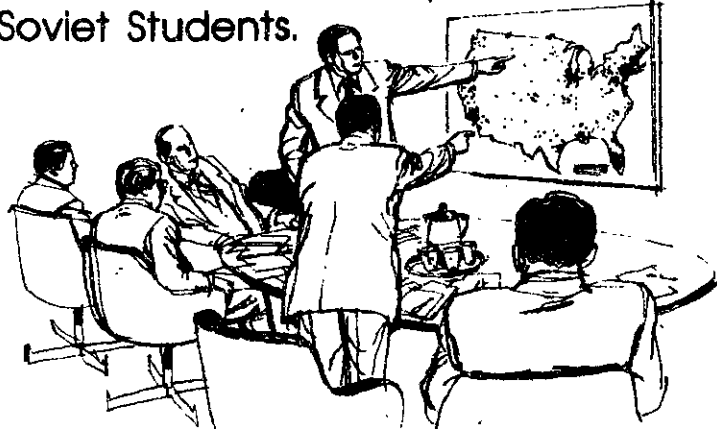
The Undergraduate Association Nominations Committee is now accepting nominations for "Who's Who among students in American Universities and Colleges." Any juniors, seniors or graduate students who don't know who they are, or possess outstanding qualities in scholarship, leadership, service, sports, citizenship, are urged to submit cover letters and resumes to the UA NomCom, ASAP, W20-403, by 12/6/85. If there are any inquiries, please direct them to Lulu at 494-1567,



or leave a message at the UA Office, x3-2696. If you don't have any questions or comments, please call Dave at 496-9692. His hours will be posted in Lobby 10 all next week.

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Tonight at 7:30 in the west lounge of the Student Center the Disarmament Study Group presents "Obstacles to Peace: The Soviet Viewpoint." While Reagan and Gorbachev are talking in Geneva, you can discuss US-Soviet relations with a panel of visiting Soviet Students.



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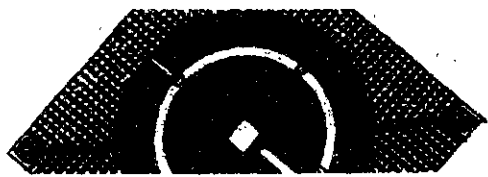
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panel discussion on the causes of poverty in America



**Tuesday
November 19
7:00 pm
Room 9-150**



From faux porphyry to paraffin - your elite guide to restoration



How to Restore & Repair Practically Everything, Lorraine Johnson, McGraw Hill, 188pp., \$19.95.

How to Restore & Repair Practically Everything is indeed an ambitious title, and like all books which make similar claims, this one is necessarily obliged to fall short of its promise. Thus this American edition of a critically-acclaimed British how-to-do-it guide must be evaluated in terms of its usefulness in those areas it does cover.

Overzealous title notwithstanding, the scope of this book is really limited to the realm of antiques and almost-antiques, and a fair portion of the repairs outlined seem to apply to situations encountered only by the British, and probably the well-heeled British, at that. (How much faux porphyry or antique papier mâché is there on this side of the Atlantic — and how much of that is in the hands of those who buy how-to books?)

The attractively-designed and illustrated volume is somewhat arbitrarily divided into fourteen chapters, within each one a number of articles describing various repair and restoration processes; neither the chapters nor their subsections are organized according to any fathomable order. It's often possible to get very lost, and the table of contents is no help, either: the chapter called "Cane, Rush, Raffia and Willow" in the table is actually titled "Basketry and Canework", while the phrase "Cane, Rush, Raffia and Willow" incorrectly appears in the folio lines for the chapter on bamboo furniture, some twenty pages away. There is also an occasional lack of translation between English and American English: what, for instance, is "880 ammonia"? It's apparently a necessity for making a fumed oak finish, but I haven't any idea what to ask for if I want to buy an equivalent chemical in Boston. And beware: when a Briton

speaks of "paraffin" he's talking about kerosene, not the stuff we Americans use for sealing jelly glasses.

Each chapter has its own "consultant restorer", and each restorer's prejudices and peccadilloes are very evident, particularly in the inconsistent threshold at which the amateur is advised to give up and seek professional assistance in repairing items. The section on the immersion method for removing stains from old lithographs and etchings is enough to make any artist or antiquarian cringe, while in other chapters the reader is steered away from far more innocuous repairs.

Still, the individual articles within the chapters are well-written, and include clear, excellent illustrations. The section on basketry and canework, once one locates it, is especially well-detailed; I wish I had had the benefit of these illustrations during the summer I spent at Scout camp twelve years ago learning to make rush seats. Many of the processes (such as stenciling, leafing, découpage, and various methods of finishing wood) are equally applicable to new work as to repair. Each chapter opens with an interesting essay on the history of the items whose repair is described therein, admittedly with a heavy emphasis on the English contribution. The history of plastics manufacture is a particular standout.

A great deal of information is contained in this book, and clearly a lot of research and design work went into its making; it's a shame that lack of holistic editing spoils the overall impact. There are less lavish, more useful books for the person who has an old Windsor chair with a loose leg, but for the serious collector of antiques whose ivory carvings and lacquered tinware aren't looking their best, this may well be the best reference book on the market.

V. Michael Bove

Stoltzman captivating; Harbison compelling

Richard Stoltzman, *clarinet recital, Jordan Hall, November 17; Boston Chamber Music Society, Sanders Theatre, November 17, event in The Tech Performing Arts Series; David Deveau, piano recital, Jordan Hall, November 16.*

Richard Stoltzman could convince an audience of the merits of any piece of music: His playing bubbles with so much life and he is so clearly enjoying himself that there's no choice but to sit back and be entertained.

Stoltzman is complete master of his instrument, but he is no practitioner of cheap showmanship. Sunday afternoon in Jordan Hall, he played a varied program, some of which would have been in dangerous territory for a conservative Boston audience but for Stoltzman's charisma.

Take Alban Berg's *Vier Stücke*, for example, launched on a Jordan Hall crowd hypnotized by the sensuous beauty of Stoltzman's performance of Debussy's *La Fille au cheveux de lin* then captivated by Debussy's *Arabesque II*. The four Berg pieces — experimental music played for Schoenberg, Berg's teacher, at a concert no critics were allowed to attend — probe the range of the clarinet, requiring some extraordinary sounds to be produced. Stoltzman attacked the pieces with inventiveness and kept the atmosphere bristling with suspense — it was impossible to avoid being drawn into his musical world.

The *Allegro amabile* was indeed given a smiling performance, the warmth of playing, subtlety of coloration providing new insights at every turn. Irma Vallecillo provided a well-balanced piano complement to Stoltzman, drawing him from Summer into autumnal hues.

Stravinsky's *Three Pieces for Clarinet Solo* were gripping, especially the last of them, done on an E-flat clarinet: Stoltzman drew the jazz out of the piece, while maintaining its Stravinsky identity.

The remainder of the program — Bernstein Gershwin arrangements — was pure en-

tertainment. The final encore, *Serenity*, by Charles Ives was just that: serene.

John Harbison's technique in his *Piano Quintet* is to push listeners into his music at the top of the funnel, trap and then guide them carefully through, before expelling them at the end, mesmerized and elated.

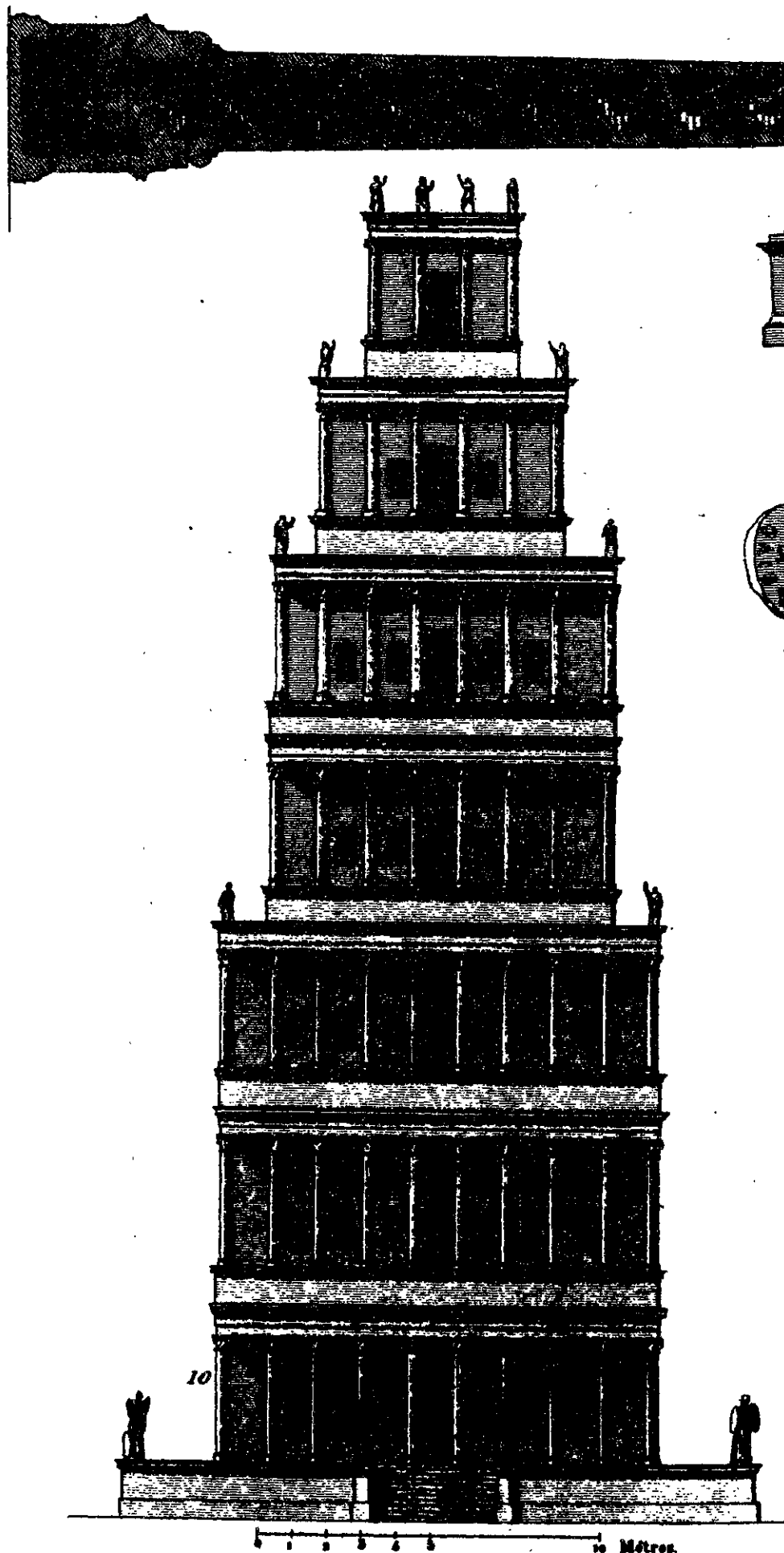
The *Quintet*, highlight of Sunday's concert by the Boston Chamber Music Society in Sanders Theatre, drew the best of the evening's playing from the ensemble. The rhythms raged frenetically for the exciting *Overture: Allegro*, to be displaced by gentle pizzicato humor in the *Capriccio*. Close ensemble playing paid dividends in the *Intermezzo*.

Concentration intensified yet more for the furious *Burletta*, extrovert on the surface, perhaps, but given a magnetic, inward-drawing treatment to evoke Harbison's special world.

Christopher O'Riley started the tensions flowing in the closing *Elegia*, pizzicato then falling through the electric-fresh atmosphere as stray raindrops in the lull of a storm. Fantastic impressions of mystery grew in intensity as the piece increasingly drew into itself, the last poignant, memorable note leaving the listener in a trance, the mind cleansed.

David Deveau gave a miserable Chopin recital on Saturday in Jordan Hall. His whole approach — superficial and uninvolved — lent a crassly mechanical air to the evening: Deveau could play the right notes, but they lacked substance. The *Polonaise Fantaisie*, Op. 61, which began the program was unromantic, the lengthy *Sonata in B minor*, Op. 58, which ended the proceedings was as lengthy as it was flat. It was an unmusical evening, a big disappointment following Deveau's rapturous recent Mozart playing with Sinfonova. I wonder what happened.

Jonathan Richmond





ARTS



Quartet explores introspection

Concord Quartet, Kresge Auditorium, November 17.

It filled Kresge Auditorium with free discussions on a Sunday night, and it was an LSC movie, it must have been an important event.

was. The world-renowned Cleveland Quartet performed a brilliant program of pieces that included the Boston area premiere of *Quartet No. 1* by MIT's own John Harbison.

Because of the restrictions it places on musical resources, the string quartet is probably the most challenging medium available to composers. The emotions normally conveyed by orchestral symphonies must be outlined by four instruments with a limited spectrum of tone colors; these instruments must also support a coherent musical structure. Despite these restrictions, the quartet genre has yielded some of the world's finest music, from the impressionistic, painterly approach of Debussy, through the emotional

fury of Beethoven's later works, to the crystalline purity of Webern.

As he explains in his program notes, Harbison's approach to his first string quartet parallels that of the serial composers. He presents a series of episodes, derived from the first few notes of the piece, compressed into a relatively short time span. Herein lies both the beauty and the difficulty of Harbison's work: the compression produces an elegant interweaving of motifs, but it does not allow the listener any time to digest the motifs as they fly by. More than one listener must have resisted the urge to raise his hand and ask, "I didn't catch all of that the first time around, could you play it again?" The feeling of information overload was furthered by the minimal movement breaks; the first movement's sinuous viola melody merged into the paired triads which bracketed the second movement's ideas. These in turn melded into the final energetic *presto fugitivo*.

The clarity with which Harbison's fugitive melodies were conveyed is a testament to the virtuosity of the Cleveland Quartet. They have an uncanny talent for augmenting even the most rapidly shifting melody, and play with a clarity and tone rarely heard by these ears. (The Cleveland has a unique tonal advantage in that they play a set of Stradivarius instruments once owned by Paganini.) It was a delight to hear each instrument as an individual voice, as opposed to the all-too-usual homogenized

mid-range with cello booming underneath.

Although Harbison's structures may be compressed in the *Quartet*, his special genius for painting emotional nuances still shone through in broad strokes. The work conveyed a sense of uneasy meditative introspection, culminating in the final movement's rise to action. The piece's complexity requires repeated listening for a complete understanding, but its emotional sense will have audiences returning to it for further study.

David Shaw

Harpsichord recital misplaced

John Gibbons, harpsichord recital, Museum of Fine Arts, November 17.

John Gibbons' performance last Sunday of J.S. Bach left me unsatisfied, but I had a hard time figuring out why. I think it is largely because solo harpsichord music is just not well-suited to concerts like this one.

First of all, the harpsichord is an instrument better suited to the drawing-room than the auditorium. The sound did not fill the hall, and although completely audible, was very thin. I know harpsichords are supposed to sound thin, but, in a small room the reverberations add fullness.

Although I like my harpsichord records, I realized Sunday that in a concert, where one gives the music undivided attention, the absence of any dynamic range makes harpsichord music a little wearying.

The third reason I was disappointed was that I had heard several of these pieces in versions for organ or for an ensemble, and by contrast, the harpsichord versions sounded emotionless and uninteresting.

The program began with the *Toccata in E minor*, BWV 914, which although not memorable, was pleasant and well-played. It started peacefully, increased nicely in complexity, and ended with an energetic fugue.

Next came the *Prelude and Fugue in A minor*, BWV 894, which suffered by comparison with the later version written for flute, violin, harpsichord, and strings. In this early version, there was no slow movement. The two movements here were difficult but played with a driving intensity which was impressive. The color and

emotion of the later version were almost completely absent, though.

The final piece before intermission was the famous *Chromatic Fantasy and Fugue*, BWV 903, which was originally written for the organ. I think Gibbons played it a little too fast; some of the richness of the organ version would inevitably be lost, but the speedy tempo resulted in more lost than was necessary.

The second half opened with *Capriccio on the Absence of his Beloved Brother*, six short movements in B-flat major, BWV 992. This seems to be the earliest of Bach's surviving compositions, written when he was 19. Surprisingly, it was the only piece of the afternoon which conveyed any emotional impact; this may be due to the programmatic nature of the work. (The movements have titles like "A representation of the various accidents which might befall him abroad" and "Fugue in Imitation of the Post".)

Next came the *Prelude in E-flat major*, BWV 998, which was pretty and nicely done. Then came the *Fantasia in C minor*, BWV 906: very fast and complex. The program ended with the three-part *ricercar* from the *Musical Offering*, which again lost a little in the translation to harpsichord (It is practically the only piece of Bach's that we know was written on the piano; it was actually an improvisation on a theme given to Bach by Frederick the Great in 1747).

All in all, the concert was worth listening to, and John Gibbons did a reasonable job, but I don't think I'd ever pay to see a harpsichord concert in the future.

Joe Shipman

Cleveland Quartet



The Tech Performing Arts Series presents...

THE CANTATA SINGERS

Handel's *Jephtha*

Handel's most emotionally riveting oratorio, *Jephtha*, will be performed by the Cantata Singers conducted by David Hoose. Sanders Theatre, November 20, 7:30pm. MIT price: \$4.

SINFONOVA

Death and the Maiden

Sinfonova will be conducted by Aram Gharabekian in a program to include Corelli's *Concerto Grosso No. 2*, Op. 6, Martin's *Études for String Orchestra* and the Boston premiere of Mahler's arrangement of Schubert's *Der Tod und das Mädchen* ("Death and the Maiden"). Jordan Hall, November 22, 8pm. MIT price: \$5.

THE FIRES OF LONDON

Peter Maxwell Davies

The Fires of London, a music-theatre chamber ensemble will perform Peter Maxwell Davies' *Le Jongleur de Notre Dame* and *Eight Songs for a Mad King*. Only 25 discount tickets available: First come, first served! Jordan Hall, November 23, 8pm. MIT price: \$6.

PRO ARTE CHAMBER ORCHESTRA

Beethoven's Fifth

The Pro Arte Chamber Orchestra will perform Beethoven's *Symphony No. 5* and Shostakovich's *Symphony No. 14* in Sanders Theatre on November 24 at 8pm. Tickets are also available for the Orchestra's December 4 concert when Stravinsky's *Symphony of Psalms* and works by Hindemith will be performed. MIT price: \$5.

CIVIC SYMPHONY ORCHESTRA

Dvorak Cello Concerto

Ronald Thomas will perform in Dvorak's *Cello Concerto*. Also included is Copland's *El Salón México* and works by MacDowell and Paine. The Civic Symphony Orchestra of Boston will be conducted by Max Hobart.

Jordan Hall, November 24, 3pm. MIT price: \$4.

RUDOLF SERKIN

Symphony Hall Recital

World famous pianist Rudolf Serkin will give a recital in Symphony Hall. November 24, 3pm. MIT price: \$6.

Tickets are on sale courtesy of the Technology Community Association. Drop by Room W20-450 in the Student Center, or call 253-4885 to check on availability.

The Tech Performing Arts Series, a service for the entire MIT community from *The Tech*, MIT's student newspaper in conjunction with the Technology Community Association, MIT's student community service organization.

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Scientists speak against SDI

(Continued from page 1)

10 percent of the MIT Physics Department signed a petition refusing to accept an SDI project. Only one of those who did not sign the petition said he declined to sign because he truly believed in the program, Cowan said.

Cowan strongly encouraged MIT to take a stand on SDI. President Paul E. Gray '54 said in his June commencement speech that MIT would not be used as a political instrument to gain endorsement of SDI. Cowan said that MIT cannot simultaneously allow SDI research and not be used for the purpose of endorsement.

"The only consistent decision MIT can make is not to perform 'Star Wars' research," Cowan said.

"The culture of science [at MIT] is a very fragile system," said Sheldon Krinsky, professor

of Urban Policy. "SDI makes a mockery of the peer review process in science."

MIT should prohibit research which for security reasons could not go into public journals, Krinsky proposed. "Can there still be SDI-free zones?" he asked.

Professor of Computer Science Joseph Weizenbaum said, "We are being tested. . . . Should we follow Germany, or should we say 'no' to the military? . . . Human problems transcend technological solutions."

Press conference on SDI

Three professors also held a press conference earlier Saturday. The scientists decried the program on technical, political and economic grounds.

Edward Purcell, a Harvard physicist who won the Nobel Prize in Physics in 1952, said SDI was put forth without any serious investigation. The offense retains an enormous advantage because it costs ten times as much to destroy a missile as to build a new one, he continued.

Purcell read a statement from his colleague Sheldon Glashow,

also a Nobel Laureate in Physics, who wrote, "I would give Star Wars a 'D' because it is a danger to peace, a disinclination to arms control, deleterious to American science and it is destabilizing, dumb and damned expensive."

Weizenbaum said he knew of very few computer professors who say SDI can be made to work. Scientists must do more than just say it will not work, he said. Scientists must also apply social guidelines because of a "special responsibility to teach by our own example," he said.

The Soviets are scared of SDI now because of its offensive power, Weizenbaum continued.

Tufts resolved against SDI

The Tufts faculty adopted a resolution last month stating that participation in "Star Wars" is inappropriate for the university.

Over 2000 faculty at universities across the country have signed a pledge to refuse SDI research projects, Goldstein said.

Weizenbaum added that MIT would be able to set a good example for other universities to follow by signing a similar resolution.

Seymour Hersh

will speak on the

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notices

Announcements

The "Statement of Registration Status" is still required of all male students who are (by law) expected to register for the draft, if they desire to receive federal financial aid.

The following students do not have to file statements: women, underage students and those who have completed the statement in previous years.

Male students who have completed the statement by indicating they are "underage" will be required by MIT (as a condition for receiving federal aid) to submit the statement annually until they state that they are registered.

Students may find that GSL and Pell Grant lenders and state scholarship agencies require the statement where MIT does not.

* * *

Morgan Memorial Goodwill of Boston needs volunteers for a Thanksgiving banquet for inner-city children, senior citizens and handicapped clients. The celebration will take place Thursday, Nov. 28 at 95 Berkeley St., Boston. For more information, contact Rosemary at 267-5407.

* * *

The Americans for Democratic Action Education Fund is offering fellowships to students interested in internships with Congressional offices in Washington, DC. Applications for the Jan. 3-31 or the July 3-31 programs must be postmarked by Nov. 22, 1985. Contact Bill or Sara at (202) 638-6447.



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MIT — Japan
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Japan Technology Forum

October 16, 5:30pm
Center Lounge, Student Center

Professor Thomas Eagar will speak on America's View of Japanese Science and Engineering. Professor Eagar spent a year in Japan with US Office of Naval Research. He has visited over 60 top private and university laboratories. He has many tales to tell.

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**Tuesday, November 19, 1985
Ashdown House
Dining Room
4:00 p.m.**

Reception to follow

ASA recognition of policy inconsistent

(Continued from page 1)

bers (black students of African descent), associate members (black non-students of the MIT community), and special members (members of the MIT community not of African descent). Associate and special members have no voting privileges. "In the past, there have been incidents in which non-black students tried to take over the organization for their own purposes," said John Tate of the BSU.

ASA recognition policies

The ASA already has a policy concerning recognition of activities. As with the GSC, one of the regulations groups must comply with that "membership may not be based upon race, sex, religion, nationality or sexual preference," according to the "Short Guide to Writing a Constitution" in *How to Become an ASA-Recognized Activity*.

"However, voting membership may be limited where germane," the guide reads. Examples of what is considered "germane" include "dues paid, three or more meetings, pledged, etc." The ASA, however, grants recognition to groups that deny membership on the basis of race, nationality or religious beliefs.

The ASA has no plans for changing its policy regarding vo-

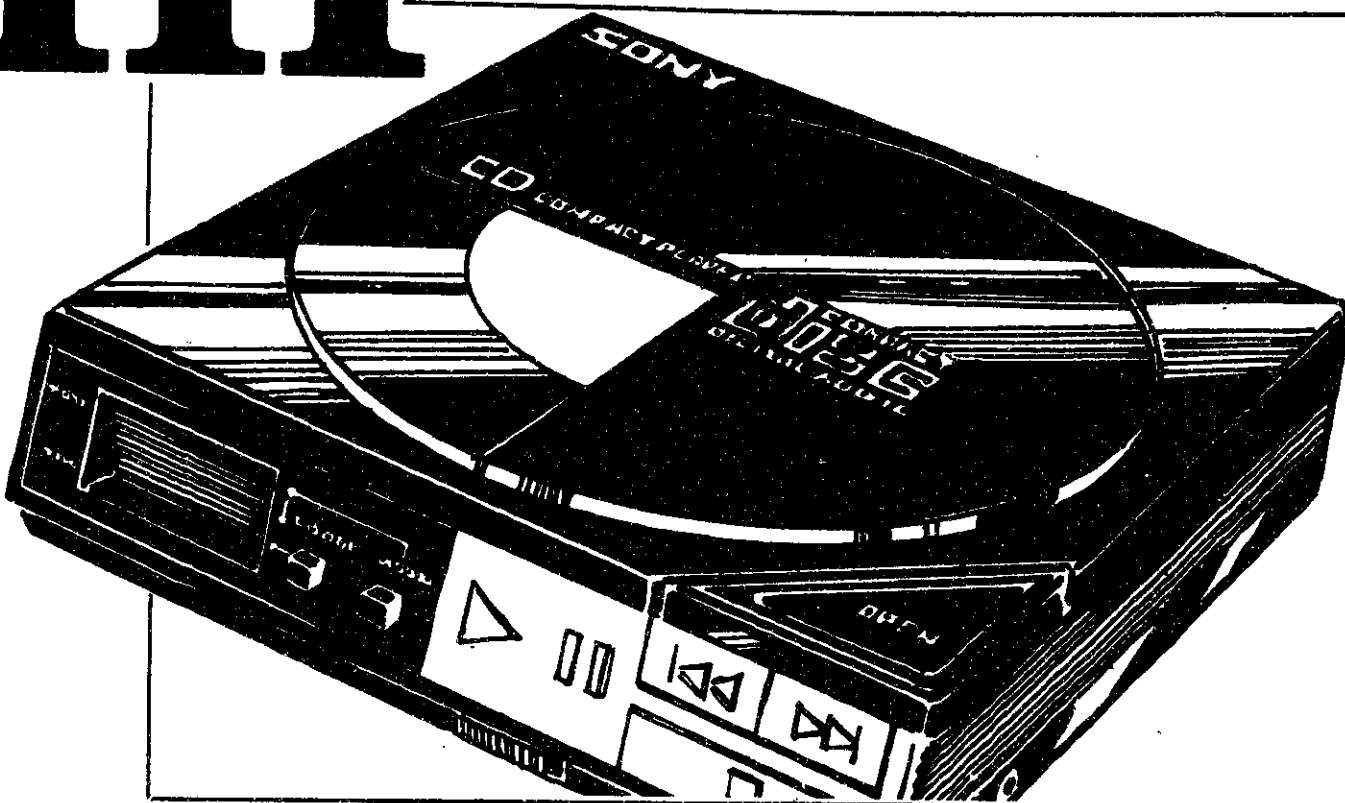
ting membership. According to Steve Burke, senior office assistant in the student affairs office, "ASA's main objective is to protect the core of the student activities."

Some ASA-recognized organizations restrict membership of any type. The Christian Science Organization of MIT grants membership only to members of the "Mother Church" or those who "are not members of the Mother Church but who are free from other religious connections," states its constitution.

Brian Cromwell G, president of the Christian Scientists, was unaware that the constitution was contrary to ASA policy. "The issue has never come up in the past," he said. The organization plans to discuss changes to their constitution at their next meeting. "We want to be sure we are in compliance with ASA regulations," he said.

It is difficult to enforce rules on groups that have been in existence longer than the ASA, Burke claims. In some cases if the "group is acting in good faith" but does not comply with all ASA regulations no action will be taken, he continued. "If students have a complaint or problem, they will see us about it," Burke explained.

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Nan Johnson - Boston Food Bank
Mel King - MIT Professor, Rainbow Coalition
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Wednesday, November 20

FILM: *Oliver Twist*
7:00pm, Room 54-100
Free Admission

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Noon, Lobby 7

(alternate location: Weisner Art Gallery - Student Center)

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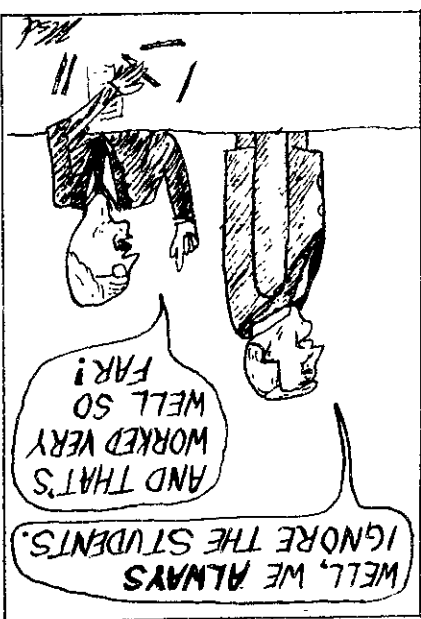
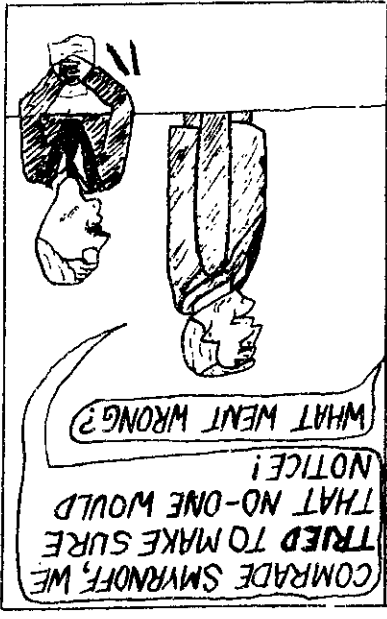
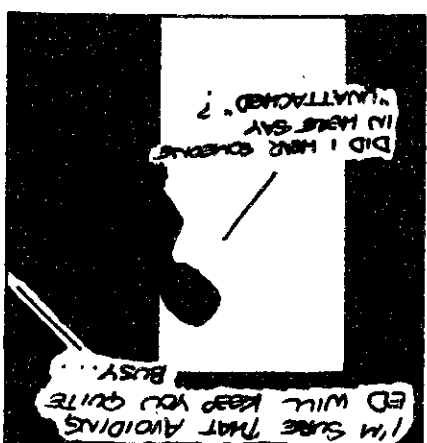
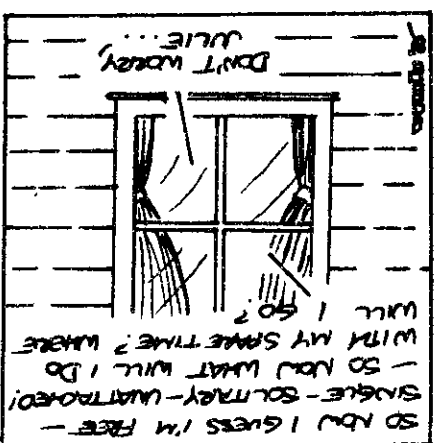
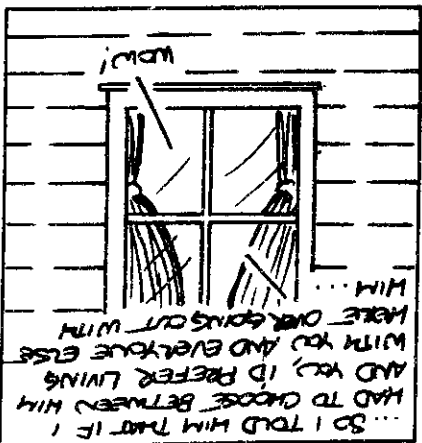
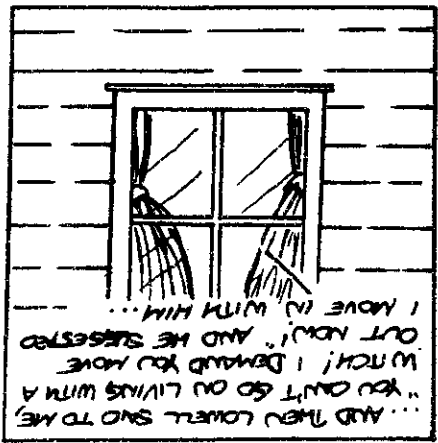
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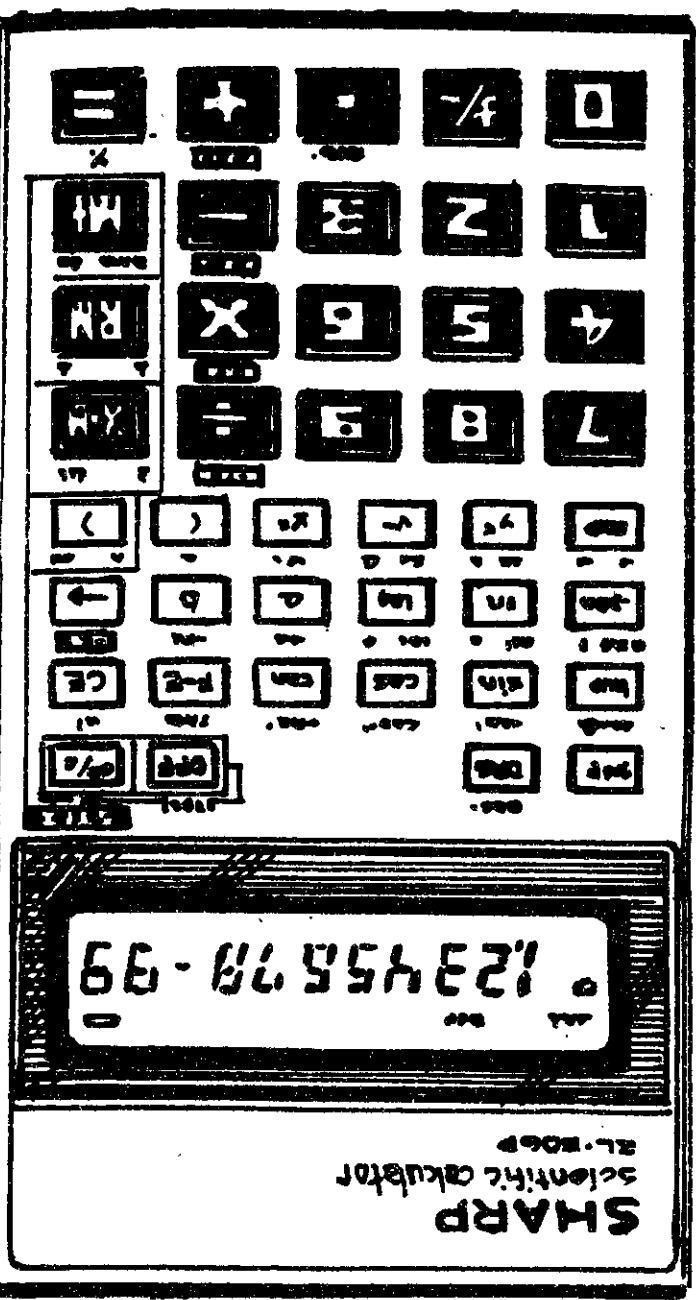
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Baseball: the best part of MIT

(Continued from page 16)

a story of dedication. No MIT baseball player ever had a better attitude than Bugsy.

We lost, 9-5, but we couldn't stop playing, even after everyone else had gone to eat the hamburgers and hot dogs and drink beer they were serving up back at the field house. Trying to savor the fleeting warmth of the late afternoon sun, somehow unwilling to let go of our resurrected talents, a dozen of us old timers took batting practice afterwards, with Al Dopfel doing pitching honors. Even I took a few cuts. Al reined in his terrible fastball so that I could whack a shot or two into the opposite field (save the one bender he couldn't resist throwing at my knees just to let me know who was still the boss). Ah, Herb Kummer ripping those shots to right center, head down on the ball, Dave Tirrell poking them with that short, compact art of his, Kevin Rowland uncharacteristically laying off the pitches around his eyes (slow bat, Kev?), the Baron's sweeping slash. Mike Dziekan. Vinnie Maconi. Steve Edelson. Mike Royal. Bugsy. Kenny Smith. The Family Reunion. We wished the

sun would never set, and that we could stay there forever, and play a million innings.

A bunch of us gathered at the Baron's house in Wellesley afterward to eat some lobster, sample his fine wines, and to rehash every Beaver baseball story we could think of (including a rendition of the Benchie Song). We didn't break up until every last triumph was retold, every funny incident was replayed. The Baron will never forget the 1972 Harvard game when we had Loyal Park and his boys down 3-2 in the late innings, and lost 5-3 on our five errors and Dopfel's tenth inning balk. There were the chicken coop dugouts at the Coast Guard and the time David Yauch's homerun impaled their left fielder on the fence. Or Chuck Holcom's move to first

which made Pete Steinhagen's look like a right hander's.

We all departed on this day, Sept. 14, much better men than we had been. All of us had retrieved something precious and wonderful from the dust of that baseball diamond on Briggs Field. When we think back on our MIT years, we do not choose to remember the endless grind of all-nighters, problem sets, and miles of drab gray marble and concrete. Our most deeply moving, humanizing, and fulfilling experiences were in the MIT baseball uniform, with Fran O'Brien leading us on to victory. To relive those experiences, for even one day, with that unique group of players and Coach O'Brien, was like being reborn. We will never forget it as long as we live.

sports

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- For a list of major prizewinners, available after February 7, 1986, send a separate, self-addressed, stamped #10 envelope to Lite Beer Winter Break Winners List, P.O. Box 4895, Blair, NE 68009.



sports

Men's cross country makes nationals

By Robert Zak

The men's cross country team qualified for next week's NCAA Division III Championships in Atlanta after placing fourth of 30 New England schools competing at Southeastern Massachusetts University (SMU) last Saturday.

SMU's Kevin White set a fast pace on his home course, cruising through the first mile (a flat, slightly downhill stretch) in 4:22. White eventually won the race with a new course record of 24:11.

MIT's top runners, Gordy Holterman '87 and Anton Briefer '88, ran the first mile in approximately 4:40. Holterman battled for a spot in the top five with runners from Westfield State and Bates. The second mile, run through a foot-deep water hazard and up a soggy grass slope, took Holterman under ten minutes to complete. The rest of MIT's scoring team was also in good position after the second mile, as most were still in the top 20.

Holterman began to fade at the crest of the hill at the end of the third mile, and he dropped 22 places over the next two miles. Briefer and Rod Hinman '88 took the team lead as they watched their teammate fall to 27th place.

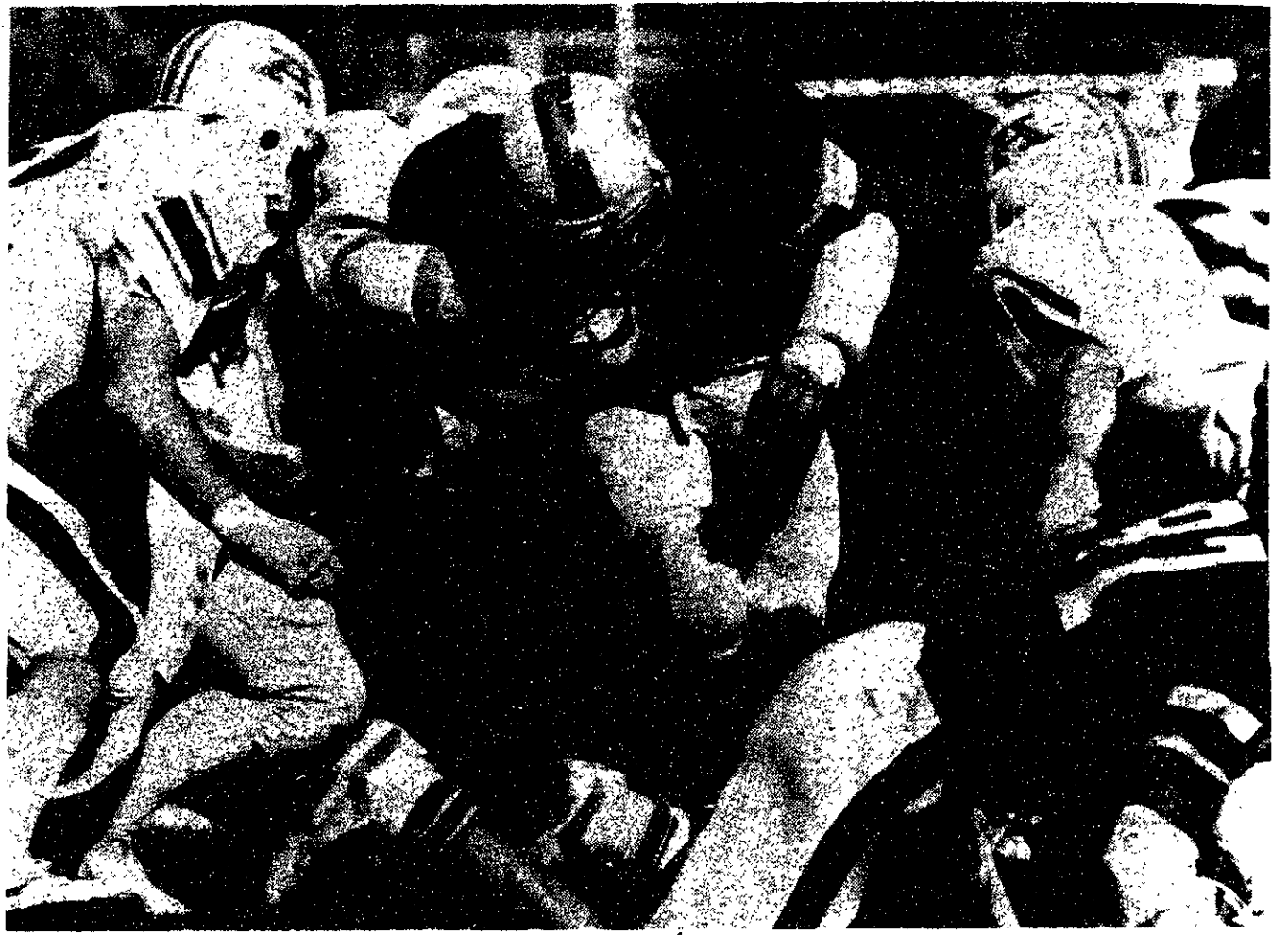
Hinman led the Engineers to

the finish line, placing 16th overall with a time of 25:06 in the second consecutive race he finished first among MIT runners. Briefer was right on Hinman's heels, finishing 17th in 25:07. Terry McNatt '87 was 23rd in 25:16. Will Sauer G crossed the line two positions back in 25:19. Holterman completed MIT's scoring team, finishing in 27th place with a time of 25:25, only 19 seconds behind Hinman.

All of the Engineers, including sixth and seventh men, Bill Mallet '86 and Turan Erdogan '87, improved previous personal record times by more than 23 seconds.

MIT earned 108 points — and a fourth place finish — for its performance. Bates won the meet with 73 points, Brandeis was second with 77 and host SMU finished third with 86 points. No other schools were close — fifth place Colby amassed over 220 points.

Even so, the Engineers did earn the opportunity to try again against Brandeis, SMU and St. Joseph's in Atlanta. Brandeis, Bates and Colby do not participate in the NCAA Championships.



Tech photo by M. Henry Wu

Fullback Hugh Ekberg '88 was among the MIT football players named to the all-New England Club Football Conference team. Also named to the first team were defensive end Rich Rice '87 and offensive guard John Newton '86. Linebacker Mark Hanson '88, defensive tackle Larry Monroe G, and offensive guard Art Gregory '87 were named to the second team.

Guest Column/Lawrence D. David

The Alumni Game: Reflections of an old Beaver

(Editor's note: David, a major in chemistry, was in the Class of 1975.)

Nobody had changed much. It was just like 12, 13 years ago, walking out onto Briggs Field again. Someone had moved the bubble completely into foul territory (that would displease Vinnie Marconi, who used to pepper that sucker in batting practice) and it was a lot warmer day than any of us could ever remember, having frozen our tails off on many an October and April afternoon out there on the diamond. But we were back. Steve Edelson — who could ever forget his homerun blast off the bubble to beat Suffolk in the bottom of the ninth? Dave Tirrell — a UMass chemistry professor now, a pesky hitter then who could not be kept off first base, or second when he felt like stealing it. Al Dopfel — the legendary pitcher who helped lead MIT baseball to respectability in the early 1970's. For one weekend we had all cast aside our offices, our laboratories, our coats, our ties, and come back to recreate the history, the fraternity, the memories unique to being MIT baseball

players, experiences which had shaped us profoundly and have followed us all ever since.

Oh, there was The Baron. Rick Charpie swore he wasn't going to catch today. Fat chance, Baron. O'B told him to get the gear on and he couldn't resist, sore arm and all. Rick was still the cheerful, jabbering Baron ("Way to be, Kevin! Launch that pop fly!") who could keep us all sharp, yet happy and loose. "Hey, who is that guy?" he inquired about a younger alumnus in practice. "He's got talent. That's cheating in this kind of game!"

He's been here 18 seasons (Has it been that long?) and he could still inspire those rusty arms and cranky legs of his old players for one more game: Fran O'Brien, how did you ever lose with such talent? After a couple of wild throws and a misjudged fly ball, how did he ever win with such talent? We'd take the field with a team averaging 5'6", 145 pounds against the likes of Northeastern, Boston College, Harvard and Holy Cross. We'd peck away at them for a few runs (remember the day we scored 19 off Boston College?) and tie up their big hit-

ters with 60 mph sinker balls, and win. O'B's ball four offense won the great game against Northeastern in 1974, our fifth win in a span of five days, when the NU pitchers couldn't throw a ball through the miniscule strike zones of Dave Tirrell, Steve Reber, Bobby Train, and we scored three runs in that ninth inning to pull out a dramatic 9-8 cliffhanger. But I can remember one of Coach's greatest moments which never showed up in the stats. Al Dopfel may have been his greatest player, but I will never forget his sense of accomplishment at sending Art Rosiello in to pitch a game in the fall of 1973. Rosiello had never played a varsity game in anything, high school or college. There he was on the mound, wearing the MIT uniform. O'B was just as proud of and rewarded by Art's persistence, hard work, and enthusiasm as he was the day we were invited to the NCAA tournament back in 1974. Yes, this was the essence of MIT baseball: a love of the game, taking on other, more talented teams and beating them, and being a part of something so much greater than the sum of its parts. Fran O'Brien knew how to tap that wellspring of desire in each of us, to urge us to put out a little more than we thought possible, to put together those divergent parts of us into the most successful MIT baseball teams ever.

But those years have passed. Since 1976, there have been no winning seasons. We met the younger alumni, who never knew a winning season, never mind a tournament appearance. Generations of MIT baseball have elapsed since our departure, our exploits now but stories O'B could tell on bus trips. Who were these kids wearing the brand new maroon and gray uniforms? The varsity looked so young — did we ever really look like that? Oh, they had their stories too: last year's victory over arch rival Cal Tech, the 26-14 loss to Bates in the big snowstorm the year before that. Yeah, there was some

potential here. Maybe not a Greater Boston League title, but they could be tough, like us.

It was great being coached again. Some of us hadn't thrown a baseball or faced fast pitching in over a decade. Yet, there they were, Beaver baseball legends, zipping through the infield and outfield drills again. It amazed us that guys like Don Alusic, Ron Norelli, and Henry Nau, who had all been gone an average of twenty years, showed up ready to play, and got in the groove so easily. We had a brief practice game in which the older alumni skunked the younger ones, and then got ready to take on the varsity. But we all had to say hello to Murph, who showed up looking so dapper, and still full of Irish vinegar, even on crutches. We had two great Irishmen, Murph and O'B, taking care of us back then.

The alumni from the class of '76 and before played the first three innings. Mike Royal was the starting pitcher. Mike was the winningest pitcher in MIT history. Just like ten years ago, he still had so much talent. An army doctor in law school, he was still slipping that low fastball by hitters. After a shaky start, he got out of trouble with a 3-0 deficit after the first inning.

O'B had started a lefty, hardly a sporting thing to do in an alumni game. Our bodies were willing, but getting the bat off the shoulder, as Kevin Rowland noted, felt a little like slow-motion rerun. By the time the lineup had batted around once and was ready to do some damage, the three innings were over. They left their mark, however. Dopfel showed in the second inning that frightening fastball which exploded in the Baron's mitt. He fanned the number three hitter, who went back to the bench shaking his head, as many have done (even Reggie Jackson himself) after facing the Dopfel. One teammate taunted Al's victim with, "Some of us wait until after graduation before we get all washed up!" Big Al washed up?

The knee, perhaps, but the arm, never (Al had that big overhand curve back in those days, too, which would vapor lock an opponent looking for the Brockton Express). Then Henry Nau induced the varsity to pound his 50 mph fastball (the Baron called it the "Kleenex ball") into the dirt and retired three of four batters he faced in the third. How many 43-year old alumni from our old opponents could do that?

Herb Kummer was picking those low throws out of the dirt at first, still glaring at anybody who threw a wild one over, and then going to chase the ball. It is still not obvious when he earned the monicker "The Big Stick" in 1975. Was it his .396 average or all those female hearts he broke in Florida? That infield, Mike Dziekan, Vince Maconi, Dave Tirrell, and Herb Kummer, was the greatest in MIT history, the infield on the 1974 NCAA playoff team. There it was, out on Briggs Field again.

We spent the rest of the game drifting toward the beverages Vince Maconi had provided somewhere farther down the third base line, leafing through the old record books and statistics I had brought along, taking pictures, and watching our successors take their turns trying to erase the three run deficit we had stuck them with. We saw guys like Vince Marinelli, who had wiped a few of our names from those record books and Bruce Diaz, who struck out the side in the fifth. Kenny Smith still looked like a tree out there on the mound. Phil Bugnacki was 40 pounds heavier, yet his boyish enthusiasm for baseball hadn't waned a bit. Buggy was always there on the bench, cheering us on, no matter how many runs down we were or how late the inning. He played in only a handful of games in the 1975 season, yet made every practice and never stopped hustling, never quit. He had a starting position his senior year — then broke his leg early in the season to squelch it all. What

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Tech photo by John M. Krusac

Lambda Chi Alpha challenge the Black Students' Union in the semifinals of the A - League Intermural football championships. The BSU defeated LCA 18 - 6. Sigma Alpha Epsilon blanked the BSU in the finals 24 - 0.