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Tuesday, November 4, 1980

Faculty members tied to Biogen

By Richard Salz

Biogen, the Swiss chemical company seeking to establish a base of operations for recombinant DNA work here in Cambridge, has ties with members of the MIT and Harvard faculty.

Phillip Sharp, an MIT biology professor, and Walter Gilbert, professor of Biology at Harvard University, were both members of the group of scientists and investors which founded Biogen in the spring of 1977. Given the state of the art of recombinant DNA technology, any commercial venture in the field would have to be closely related to basic research of the kind being done at universities such as Harvard and MIT, according to Sharp.

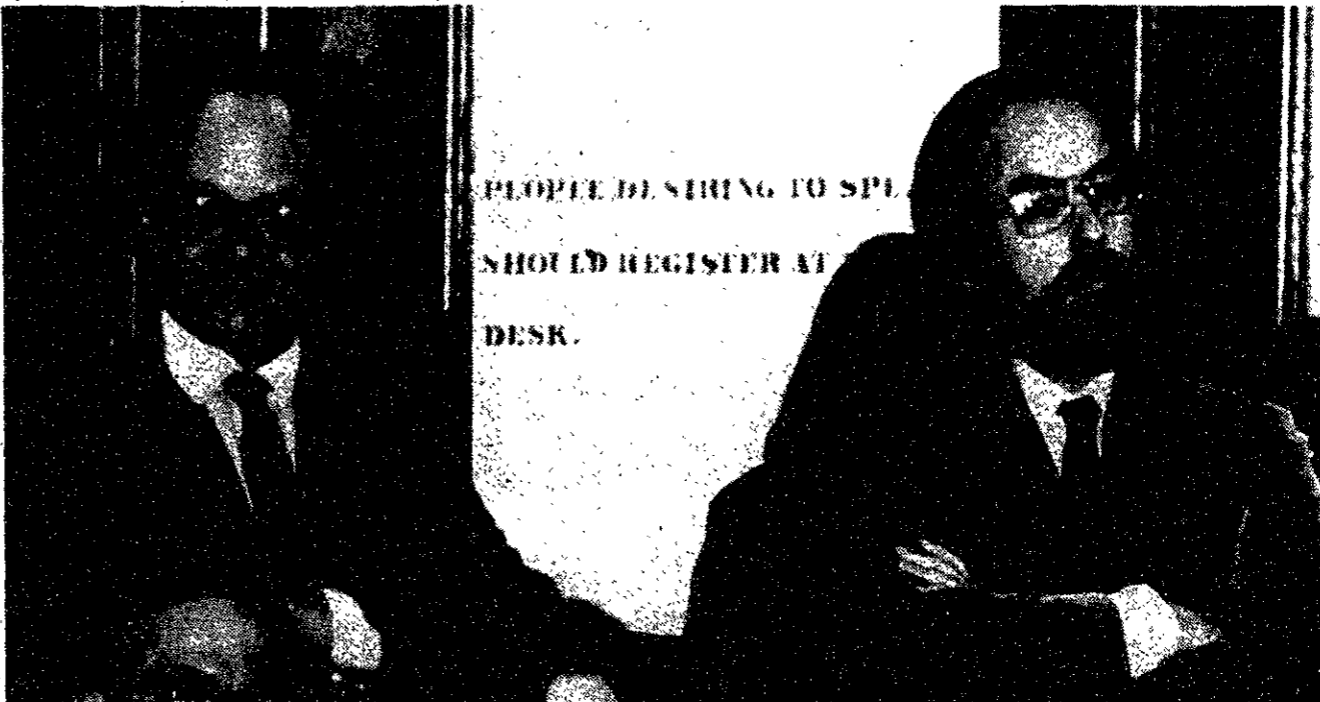
In addition, Daniel Wang, MIT Professor of Nutrition and Food Science is also a member of the Biogen board. The board is comprised of nine scientists who meet four to five times each year to decide the scientific direction of the company. Gilbert, Sharp, and Wang are the only Americans on the board; the other six members are European.

Testifying before the Cambridge Biohazards Committee last Monday, Andre Muller stated that one of the four reasons why Biogen chose Cambridge as its US entry point was the proximity to Harvard and MIT. Muller is director of US operations for Biogen and would be responsible for setting up the Cambridge facility.

"I saw an opportunity for doing useful things in the area of recombinant DNA, and I saw there was no vehicle for doing these things commercially," said Sharp, explaining the reasons behind the formation of the company.

Sharp is currently working on the molecular biology of animal viruses. Gilbert was a Nobel recipient last month for his work a method of determining the sequence of DNA. While Biogen is working on artificially-produced interferon and "tailor-made" bacteria, Sharp sees little danger of a conflict of interest. "The only potential source of conflict would be in how one divides one's time."

Gilbert agreed, testifying at last week's hearing that, "the company is totally independent of the university; one has nothing to



Harvard Professor Walter Gilbert, left, and MIT Professor Phillip Sharp, both members of the Biogen scientific board, look on at last Tuesday's public hearing before the Cambridge Biohazards Committee. (Photo by Rick Parker)

do with the other." The *Boston Globe* said last week that it is against MIT policy to allow faculty members to be involved in commercial ventures as principal founders. This is not true, according to the Provost's Office. Commenting on his position, Sharp claimed that, "there's no more problem here than thereal consulting role."

Biogen has other local ties in addition to the contributions of the three faculty members. One of the sources of the company's initial funding was T. A. Associates, a venture capital's a stockholder in T. A. Associates.

PEOPLE DESIRING TO SPEAK
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DESK.

Herman recounts horrors

By Jerri-Lynn Scofield

After the collapse of the organized military system within the USSR, the Russian people will "know which way to turn their guns" predicts Victor Herman, an American citizen who spent over forty-five years in the Soviet Union.

Speaking Sunday night before a crowd of more than fifty people in the Mezzanine Lounge of the Student Center, Herman predicted the future of Soviet-style communism, as well as describing his eighteen-year ordeal as a prisoner within the infamous "Gulag Archipelago."

Herman forecasts great political upheaval in the Soviet Union in the next five years, as a result of either of two possible scenarios. Herman described war between the USSR and China as a "racial revolution" in which the Chinese and Russian peoples would try to assert individual "self determination." The other scenario, he said, concerned the transfer of power after the death of Mikhail Suslov, the seventy-eight year old leader who is thought by many, including Herman, to be the most powerful person in contemporary Russia. Suslov is best known in the US as the man believed to be responsible for forcing former Premier Nikita Krushchev to withdraw from the Soviet politics.

Herman displayed great faith in the instincts of the Soviet people, describing them as "dissidents in their brains." The Soviet totalitarian structure of government prohibits Russian citizens from obeying these instincts. In the modern USSR, "... every third man is in uniform. As the Russians say, every second man is a plainclothesman and the one that is left is an informer."

Herman first went to Russia in the early 1930's, during the nadir of the Great Depression. At that time, the Ford Motor Company had signed a contract with the

USSR to build automobile factories for the industrially weak Soviets. Herman, then a sixteen year old Detroit native, followed his father, mother, brother, and sister to a site near the modern city of Gorky.

After a few years in the USSR, Herman entered flight school. He became a test pilot and parachutist. In 1937, he broke the world record for free fall parachute jumping by falling for over 24,000 feet in a jump that lasted over 142 seconds. This exploit was reported by the international press, which dubbed Herman as "the Lindbergh of Russia." After Herman had attracted such widespread attention, the Soviet government invited him to renounce his American citizenship, assume Soviet citizenship, and join the Communist party. Herman refused.

In 1938, Herman was arrested and imprisoned without ever being formally charged with a crime. In his book, *Coming Out of the Ice*, published last year, Herman detailed the horrible conditions he experienced within the Soviet penal system during the Stalinist regime. These included: fifty-four straight days of beatings until "I was bleeding from every opening in my body," hunger so severe that he was forced to kill and eat raw rats in order to survive, and eight years of banishment to the frozen wastes of Siberia. After eighteen years of punishment, Herman received a letter from the Soviet government acknowledging that he had never committed any crimes.

Herman was able to leave the USSR in 1976, under terms of an agreement negotiated as part of the Helsinki Accords. Within two years, he was reunited with his wife and two daughters in the US. Asked how long it took him to adjust to freedom, he replied "one second."

Nuclear targeting examined

By Alain d'Heurle

Presidential Directive 59 (PD-59), the strategic arms policy directive issued by President Carter last July, is not a first strike strategy and does not offer plans for winning a nuclear war, asserted Walter Slocombe, Deputy Undersecretary of Defense for Policy Planning. Slocombe spoke at MIT's Center for International Studies last Thursday.

"Strategic nuclear deterrence over the full range of contingencies," Slocombe said, is the objective of the "countervailing strategy" which PD-59 implements, even if a conventional war should break out between the

superpowers. It must be made clear that the Soviets could in no circumstances achieve anything plausibly amounting to victory in any nuclear exchange, he said.

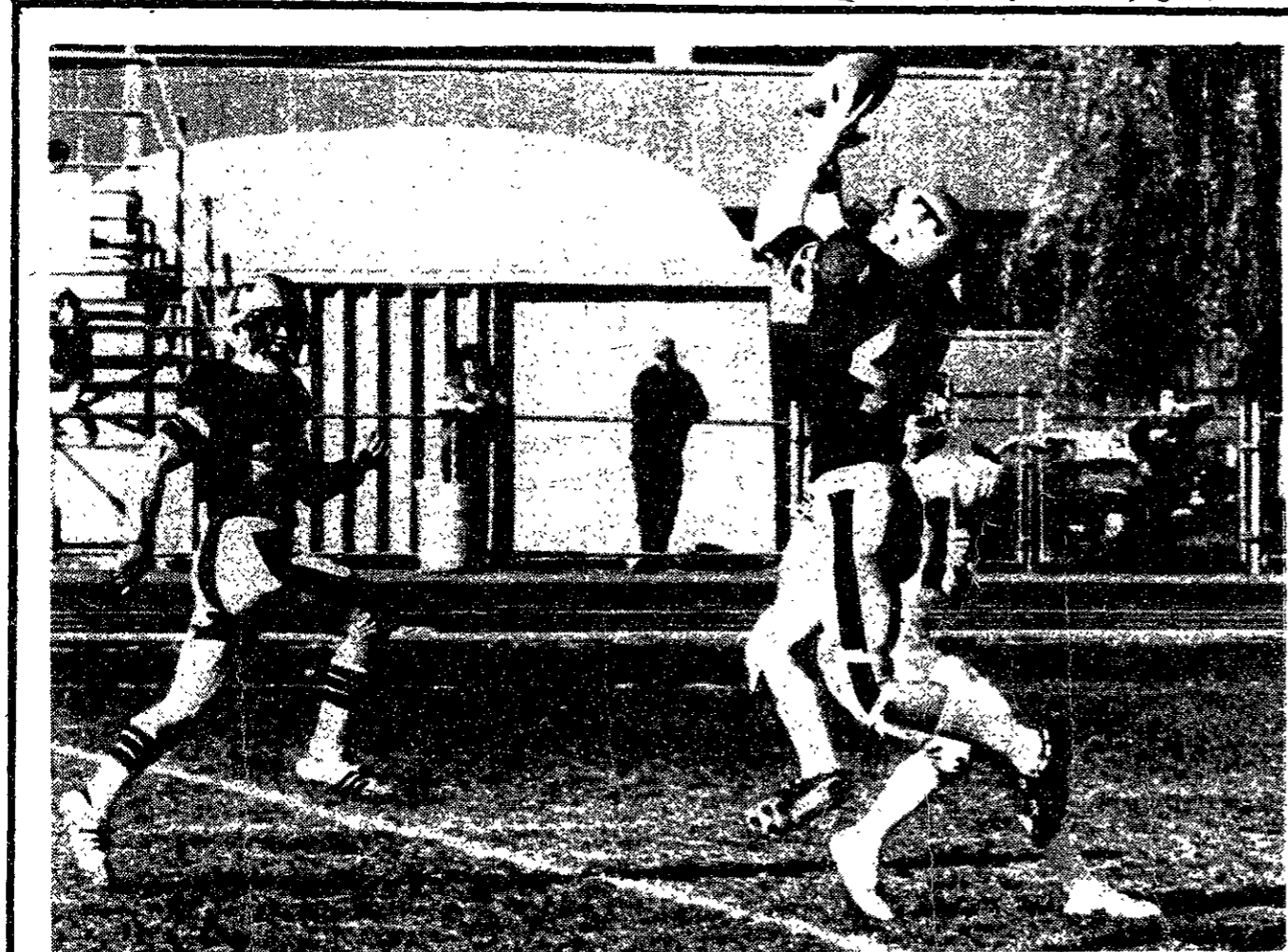
We must have the force and options to retaliate effectively, Slocombe said, and the Soviets must be aware that we do. While the details of PD-59 remain secret, he explained, its broad outlines have been stated publicly.

PD-59 stresses improved capacity for retaliation in all contingencies, Slocombe said, thus involving revised targeting policy, enhanced flexibility of options, and improved survivability

of command and control systems. He indicated that PD-59 offers a choice of options for striking at the targets which the Soviets value most — political and military control structures, nuclear and conventional military forces, and military-industrial capacity.

The strategic doctrine embodied in PD-59 has become necessary, said Slocombe, because Soviet strategy apparently contemplates goals not deterred by an all-or-nothing US response. Objectives which the Soviets appear to consider are: victory strategies in nuclear war,

(Please turn to page 5)



Doug Gouche '83 leaps high to pick off an errant Buffalo State pass as teammate Bob Zalucki '83 looks on. (Photo by Al O'Connor)

US General Elections are today!

Voting sites for MIT students are:

- Back Bay** — Boston High School, on Newbury Street between Massachusetts Avenue and Hereford Street. Residents of Bay State Road vote at BU's Miles Standish Hall.
- Senior House** — The school, on the corner of Windsor and Harvard Streets in East Cambridge.
- Other Dormitories** — Cambridge firehouse on Massachusetts Avenue between MIT and Central Square.

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news roundup

World

Iran sets hostage terms — The Iranian Majlis set terms Sunday for the release of the 52 American hostages still held in Tehran. According to Tehran radio, the hostages will only be released together if all set conditions for release are met. Otherwise, they may be released in stages as the US complies with Iran's terms. President Carter commented that the Iranian action "appears to offer a positive basis" for the future release of the hostages. Complications may arise, however, as there have been reports that the students are now unwilling to release the hostages to the Iranian government.

Campus

Dirtbags wins UMOC contest — The "Dirtbags," the Baker House candidates in last week's "Ugliest Man on Campus" contest, won first place in a field of fourteen entries. The contest, run by Alpha Phi Omega, collected \$4037.52 for the American Cancer Society. The final standings for the official candidates were:

Dirt Bags	\$717.08
The Hump	633.94
Klinger	324.57
Dark Vader	226.33

Top write-in candidates were Jerry Marks with \$631.87 and Steve Piet'with \$485.79.

By Jay Glass

Weather

Generally cloudy today but quite mild. Highs should reach 60. There is a chance of a few widely scattered rain showers. A cold front will push through overnight, and lows will be in the middle 40's. Cooler tomorrow with highs in the middle 50's under sunny skies. Temperatures dropping tomorrow night into the upper 30's. Chance of rain 30 percent today, 10 percent tomorrow.

By James Franklin

classified advertising

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City Limits Magazine, a new youth-oriented monthly, wants writers. We're also establishing a Student Advisory Board, to shape the editorial policy for the magazine. Contact Jeff Stern, 482-3880.

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Tony will introduce legislation to reform workers' compensation.

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opinion

Editorials

High Tech

In his speech before the Massachusetts High Technology Council last month, President Gray showed admirable restraint from entering an enhanced honeymoon with local industry.

The Institute cannot be all things to all people. A reality of limited resources, manpower, and funding prevents this. It is therefore important that MIT not be sidetracked from its two major functions: undergraduate education and research.

The Massachusetts High Technology Council had asked MIT to start an expanded education program for Massachusetts engineers. The Council wanted the Institute to offer a graduate degree program at a slower pace or on a part-time basis. They pointed out that Stanford University has a fairly extensive adult engineering education program and that portions, presumably on videotape or similar media, were locally available. The Council pointed out that such measures would "heighten the attractiveness of Massachusetts to engineers."

In his response, Gray explained that MIT has a history of a "mutually supportive" relationship with industry. Gray described the Industrial Liaison Program and the cooperative program in the School of Engineering. In addition, he highlighted some of the sponsored research programs receiving funding from industry, such as the Polymer Processing Program, funded by a consortium of a dozen industries.

In addition, MIT has its own "video school." The Center for Advanced Engineering Studies (CAES) offers several hundred videotapes on a score of courses.

The Council's request is a selfish, and perhaps short sighted, one. By entering into a protracted arrangement with local high technology industry, the Institute runs the risk of losing sight of its basic academic orientation. Should the Institute decide to become more involved with and responsive to the needs of industry, the focus on research, one of the Institute's trademarks, may shift to the more commercial field of research and development. Having abandoned long-range projects with little obvious commercial benefit for more immediate profit-oriented industrial projects, MIT's position as a leading information source would be seriously weakened.

The concept of off-campus programs or videotaped programmed instruction offering the equivalent of an MIT education is, as any undergraduate can tell you, absurd. A good deal of the education one receives here comes from outside the classroom—from UROP, relationships with faculty members, fellow students and the like—and no amount of television watching can ever come close.

Pulling levers

The polls are now open for the conclusion of the longest election campaign in history.

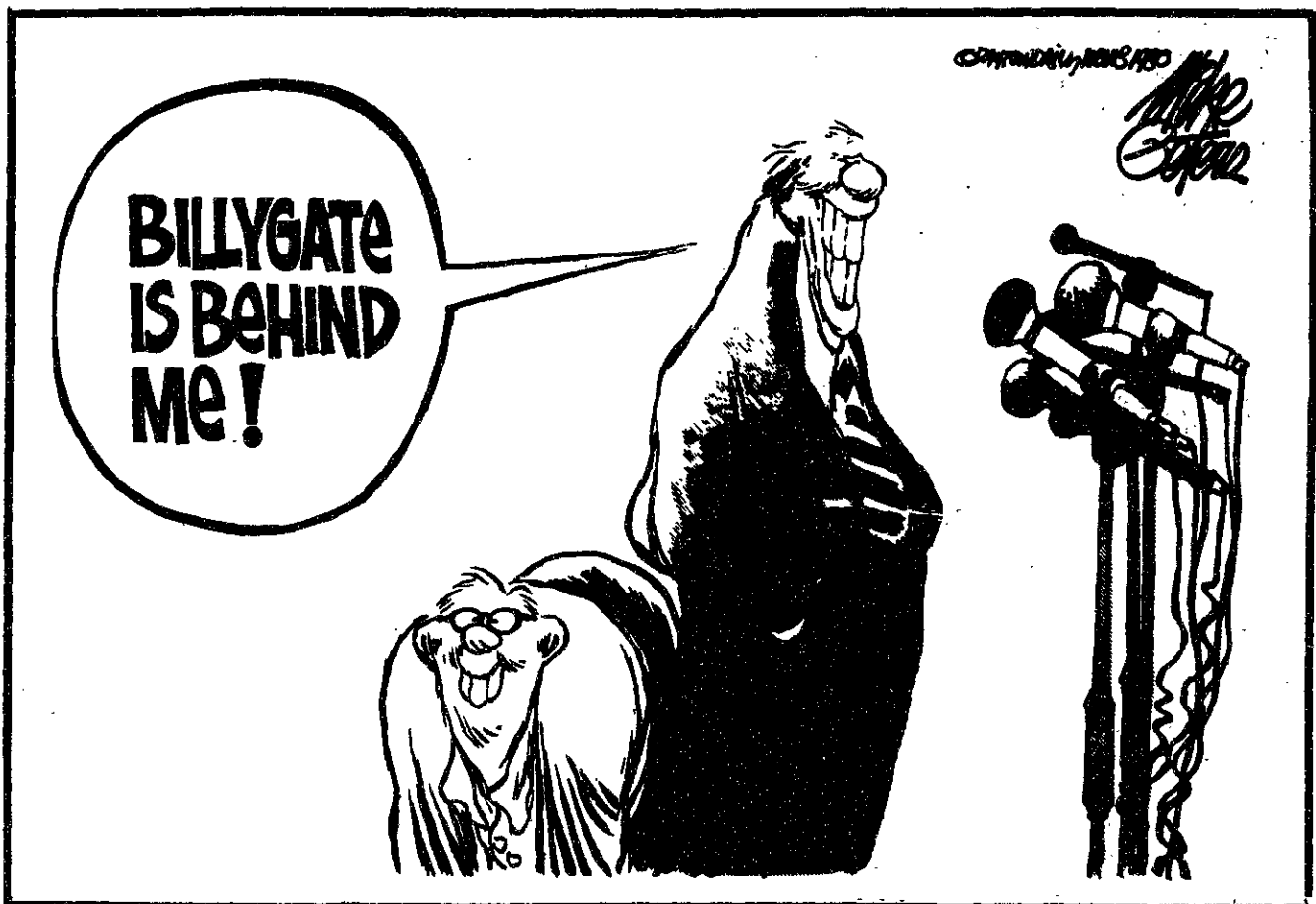
Registered voters should have a two-step checklist to get them through this year's quadrennial exercise in democracy.

First, voters should take some time during the day to actually make their voting decisions. The Presidential contest is obviously the chief consideration and it should not be left to a last-minute whim in the voting booth.

There are other important issues on the ballot, however. There are local races in both Boston and Cambridge. Referenda range from a straightforward statute on handicapped access to public places to the controversial Proposition 2 1/2. These issue votes, especially the Proposition 2 1/2 question which affects everything from taxes on fraternities to city services, should be carefully considered before the trip to the polls. It is much too late to ask for facts about an issue when the curtain is drawn behind you.

Second, voters should be sure to actually make the trip to the polls. In an election as protracted as this, voters cannot shirk their duty to pass judgment on the state of affairs. If they find attractive viewpoints, they should side with them; if they find the entire scene unattractive they should articulate that.

Silence today will be a non-action voters will have a hard time living with for the coming years.



feedback

Balance of powers: Vote GOP

To the Editor:

Your endorsement of John Anderson in the October 28 issue reflects an unfortunate lack of historical perspective. The distasteful choices offered to the electorate by the major parties this year are the inevitable outcome of the series of electoral "reforms" initiated by the Democrats after the 1968 convention disaster and the selection of the "distasteful" Hubert Humphrey as that party's presidential candidate. The same electoral rules that give us Carter vs. Reagan this year, gave us McGovern vs. Nixon in 1972, which was seen as a success for the reforms. To some extent, the current upset over electoral rules is simply liberal sour grapes over the absence of a liberal

spokesman from the ticket of the major parties.

The underlying problem, unfortunately, is not the electoral process but the increasingly obvious inability of policies based on deeply-held liberal ideals to deal with the problems of our day. Since much of the electorate has been educated to be distrustful of non-liberal ideas and members of the Republican Party, voters have been unwilling to throw the Democrats out and give the Republicans a chance to try their ideas. As long as the Republicans are not seen as a legitimate alternative to the Democrats, neither party will be responsive to the needs of the public at large. The Democrats will concentrate on doctrinal

squabbling in the belief that their candidate is a sure thing, while the Republicans will use ideological purity as their criterion since they figure they have little chance anyway. One need only look at the growing acrimony in Massachusetts over spending and taxes to see this process in operation. Proposition 2 1/2 is not the response to excessive spending in this state; a switch to the Republicans might be better.

If Anderson is an alternative, he is one because he does not accept all the liberal dogmas of the Democrats—his status as an independent does not make him an alternative. Voters should get a choice of policies and ideas developed in the belief that the best ideas will win, whether they are liberal or not. If you are seriously interested in getting better people onto the ballot for president, the way to do that is to advocate voting Republican across the board. Once both parties become convinced that issues and solutions to problems matter in their electoral fates, America will get the benefit of serious competition in the electoral process. Until a better balance is restored, we can look forward to one election after the other in which most voters try to decide which candidate they dislike least.

Yale Zussman '74

Editorials, which are marked as such and printed in a distinctive format, represent the official opinion of *The Tech*. They are written by the Editorial Board, which consists of the chairman, editor-in-chief, managing editor, and news editors.

Columns are usually written by members of *The Tech* staff and represent the opinion of the author only, not necessarily that of the rest of the staff.

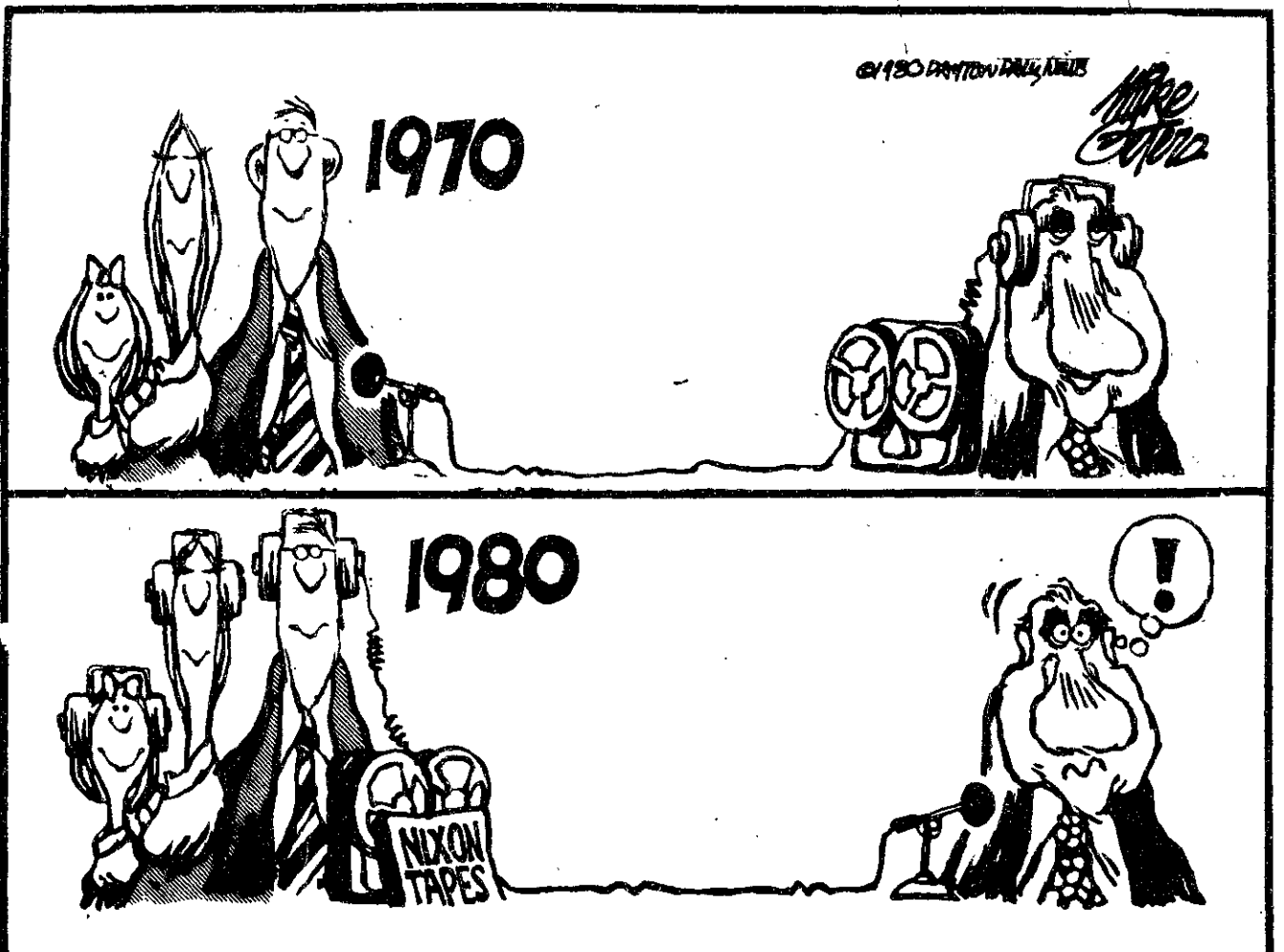
Letters to the Editor are written by members of the MIT community and represent the opinion of the writer.

The Tech will attempt to publish all letters received, and will consider columns or stories. All submissions should be typed, preferably triple spaced, on a 57-character line. Unsigned letters will not be printed. Authors' names will be withheld upon request.

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Slocombe defends target policy

(continued from page 1)

the ability to wage a prolonged nuclear exchange, initial strikes at military targets, and the survival of the regime, Slocombe pointed out, adding that there are uncertainties in our assessment of Soviet thinking. These conclusions about Soviet strategic policy were emphasized by Team B in the 1976 CIA-sponsored debate.

Although PD-59 seems to adopt all the objectives imputed to the Soviets, Slocombe emphatically denied that the US contemplates victory in any nuclear exchange. Rather, he said, we must insure that the Soviets could not think such a victory possible. PD-59 does not assume that a nuclear war could remain "limited," he said, nor that an exchange would extend over a period of weeks or months.

Slocombe also stressed that PD-59 does not call for the deployment of increased numbers of weapons, aside from those already called for by the Carter administration. It is not inconsistent with future progress in arms control, he said.

Slocombe pointed out that PD-59 is not a radically new doctrine but rather an evolved refinement of strategic policy. Targeting has never been exclusively "counter-value" (aimed at cities), he said, and the "limited nuclear option" was introduced in 1973 by then-Secretary of Defense James Schlesinger.

Asked whether "some possible future US leader" might not initiate a war using the options provided by PD-59, Slocombe answered that this is indeed a pos-

sibility, if unlikely, especially in a situation in which the US lacked the conventional forces to respond to a conventional Soviet threat. The great risks and uncertainties of nuclear war must not be underestimated, he said, nor should the maintenance of our conventional forces be neglected.

Slocombe was queried whether PD-59 leads to a "strategically unstable" situation, in which it is to the advantage of either side to launch a first strike. He responded that the alternative, of not developing first strike capability while the Soviets do so, is not acceptable.

Nor would it be credible, he said, to claim that we are not implementing the improved guidance systems which allow effective counterforce strikes, when it is known that such systems exist. The Mark 12A system now being installed on Minutemen III missiles are said to give a high probability of an effective hit at an enemy missile silo.

Future arms control negotiations must seek to increase the chances of survival of the systems of both sides, he said, so as to minimize the advantage of a first, preemptive strike.

This is an era of strategic parity, Slocombe said, and PD-59 seeks to maximize deterrence in this situation. He said that SALT II (the Strategic Arms Limitation Treaty) should be ratified.

Slocombe is also Director of the Defense Department's SALT Task Force. When PD-59 was issued without the knowledge of Secretary of State Edmund Muskie, Slocombe was chosen to brief Muskie on the directive.

notes

Announcements

There is a limited number of copies of **Our Bodies, Ourselves** available free of charge in the UAS office, 7-103.

* * * *

Anyone interested in being a **sheerleader** for MIT's Varsity Basketball Team should call Brenda Kitchen at dl-7616 or leave a message at x5-7600. Enthusiasm is the only requirement, so come out and join us.



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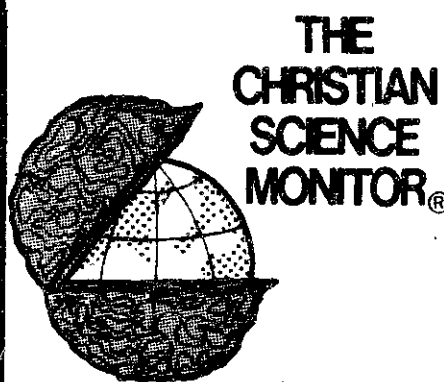
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ARTS

Good play, for The Price

The Price, by Arthur Miller, directed by Brian Smiar. At the Lyric Stage thru November 30, \$5-\$7. Call: 742-8703.

Arthur Miller is well-known as a student of American family relationships. His most famous work is *Death of a Salesman*, but Miller extends *Salesman's* theme to several other plays, including *The Price*.

The Price is the story of two estranged brothers and their long-dead father. The father's presence is felt only by way of an attic full of family heirlooms. Victor Franz is selling the contents of the attic, and needs his brother Walter's agreement before closing the deal. When the two of them get together in the attic, for the first time in 16 years, much of their angry past is dredged up.

Ron Ritchell does an efficient job as the tired Victor. His portrayal is perhaps a little too competent. Vic should appear somewhat confused, and more defeated than in Ritchell's performance.

The show-stealer is Jerry Gershman as the nonagenarian furniture dealer, Gregory Solomon. Solomon is attempting to negotiate a price with the reluctant Victor (thus the play's title). Gershman plays this role with elegance. Solomon is a thoroughly delightful ancient rogue, a real character. His appearances are characterized by laughter.

This raises an interesting question. Is he supposed to be funny? This is definitely a serious play, but without the color that Solomon lends the production, it would be much too intense. There is an awful lot of negative feeling and embittered argument between the principals, especially during the second act. Solomon's interruptions provide a necessary distraction for both the audience and the players. Nor is Solomon's time onstage "wasted". Miller is a master, and every interchange that involves the furniture dealer adds some important information about the attitudes and emotions of the Franz family.

Miriam Varon does an adequate job as Esther Franz, Vic's wife. Unfortunately the same cannot be said of Ted Davis's portrayal of the successful Walter. Davis plays his part properly, but without any nuance. There is little feeling in the role. In particular, his attempt to instill emotion by drawing every line falls flat. There has to be emotion behind the words before their meaning can be felt, not just funny noises. Davis isn't helped any by his make-up job. He should look several years older than Victor, not younger.

A final word about the set. It was faithful to Miller's conception — a truly believable attic. Overall, I would recommend this production of *The Price*.

Michael Taviss



Ron Ritchell and Miriam Varon as Victor and Esther Franz in Arthur Miller's *The Price*.



The Kit Kat Klub Emcee (Joe Cacciola) romps with *Two Ladies* (April Waters and Pheobe Green) in a number from the Musical Theatre Guild's production of *Cabaret*. The show runs November 7, 8, 9, 13, 14, and 15. (Photo by Rick Parker)

Swampland graphics by Jon von Zelowitz

ON THE TOWN MUSIC

Roches at the Paradise Tues. Nov. 4.

Bobby and the Midnights featuring Bob Weir at the Orpheum Tues. Nov. 4.

B-52's at the Orpheum Thurs. Nov. 6.

Private Lightning at the Paradise Sat. Nov. 8.

Kansas at the Garden Mon. Nov. 10.

Plasmatics at 15 Lansdowne St. Thurs. Nov. 13.

Talking Heads at the Orpheum Fri. Nov. 14.

999 at the Paradise Sat. Nov. 15.

Gang of Four at the Channel Tues. Nov. 18.

Siouxie and the Banshees at 15 Lansdowne St. Thurs. Nov. 20.

Rockpile, Moon Martin, Ravens at the Orpheum Sat. Nov. 22.

Buzzcocks, Rattlers at the Bradford Hotel Tues. Nov. 25.



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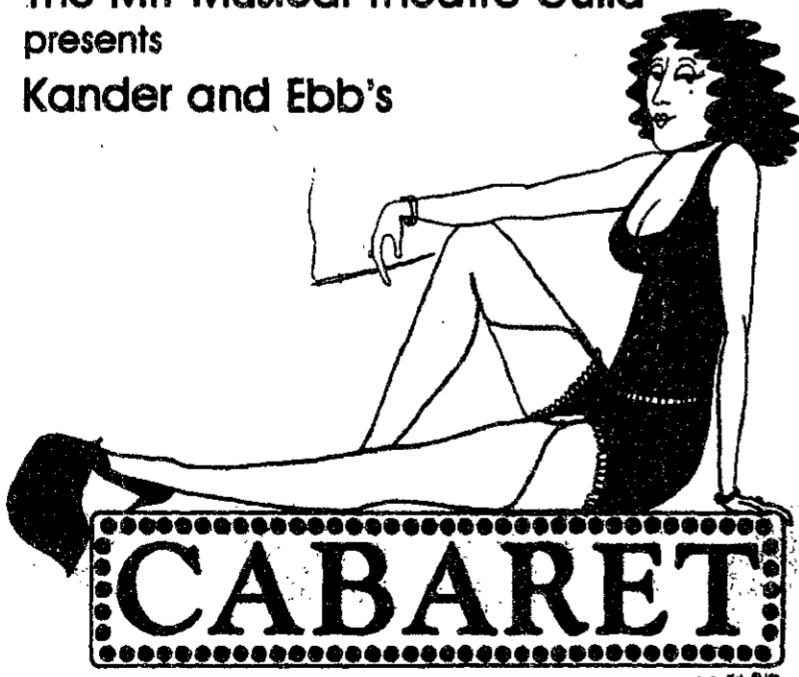
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sports

sports update

Bowling — MIT's Mark DeWitt '82 won the singles title in the University of Connecticut tournament held Sunday. DeWitt bowled a 232-178-226 series for a total of 636. In addition, the doubles team of DeWitt and Mat Womack '81 finished second in doubles competition by seven pins to RPI. The team title was taken by West Point.

Football — The Engineers completed their regular season with a 21-8 victory over Buffalo State Sunday. MIT's 6-1 record puts it in good shape for a playoff berth in the National Collegiate Football Association (NCFCA). Sunday's win was sparked by Jeff Olson's '81 two touchdowns on runs of two and eighteen yards. Stu McKinnon '81 added six points for the Engineers with a 15-yard reception of a Barry Jordan '83 pass. The first round of NCFCA playoffs is scheduled

for the weekend of November 14-16.

Soccer — Coast Guard defeated MIT in the season soccer finale, 5-2 Saturday in Steinbrenner Stadium. MIT jumped out to a 2-0 lead, but the Coast Guard fought back, tying the game 2-2 late in the second half. In the overtime periods, Coast Guard dominated, scoring three goals, to give MIT a record of 4-9.

Sailing — MIT had a good weekend, finishing first in both regattas it participated in. At the Schell Trophy held here Saturday and Sunday, the Engineers took top honors among 16 schools, and Tech sailors won the Coast Guard Invitational on Sunday. Dave Kuller '81, Steve Dalton '81, Ed Marcus '81, and Dave Chang '82 participated in the Schell Trophy, while Al Pleus '84, John Cross, Penn Edmunds, and Jon Uygur represented MIT at

Coast Guard. By winning the Schell Trophy, MIT qualifies for the Atlantic Coast championships at Navy November 15-16.

Rugby — Club Rugby now stands at 4-4, following a 33-3 romp over the Boston Gentlemen. Tech led only 7-3 at the half, but exploded in the second stanza, using a strong wind to its advantage. MIT closes its season next Saturday at Harvard Business School.

Water Polo — The water polo squad had a tough time at the National AAU Championships at Brown, losing all three of its matches by lopsided scores. The Techmen lost to the New York Athletic Club 11-3, to Industry Hills 17-0, and to Loyola of Chicago, 11-2. Next weekend, the Engineers compete in the New England Championships at Harvard, looking for a spot in the Eastern tourney at Syracuse the following week.



Bill Uhle '81 battles a Coast Guard player for a loose ball in the Engineer season finale. Coast Guard rallied from a 2-0 deficit to win 5-2 in overtime. (Photo by Al O'Connor)

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