The Tech

FRESHMEN:
Work for The Tech?
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VOLUME 91, NUMBER 29 TUESDAY, AUGUST 3, 1971 MIT, CAMBRIDGE, MASSACHUSETTS FIVE CENTS

Rogers Report due for fall

A high-level Task Force on Education may recommend this fall fundamental changes in the format of MIT's undergraduate education.

The effect of the departmental structure on this four-year period could be diminished, while increased contact between students and faculty may be encouraged through a program similar to the current undergraduate research opportunities venture.

Additionally, the Task Force's report will most likely suggest the establishment of a separate Institute division for educational research.

Appointed late in the past school year, the Task Force was ostensibly to carry ahead the work of the Commission on MIT Education to the point of setting specific proposals before the faculty. The Task Force met through May and during the summer, and has reached enough of a consensus for chairman Hartley Rogers to begin writing a first draft for their report.

Once the report is completed sometime during the fall it will be presented to President Jerome Wiesner. From his office it goes to the faculty for action. Until the report is actually released it is hard to predict how the faculty will react to the Task Force's sometimes sweeping proposals for change.

Evaluation of the role of the departments in MIT's educational mission is nothing new. At the Institute this departmental structure has sometimes been charged with hampering both undergraduate education and disciplinary research. Sources within the administration have reported that in the President's office, too, there is disenchantment with some departmental policies. The Task Force will probably recommend the creation of an administrative post somewhat akin to a dean for undergraduate education, with some power to co-ordinate the program for these four years.

Encouraging closer contact between students and faculty stems in part from the desire to make undergraduate education a more total involvement with MIT. Many undergraduates, professors have noted, aren't involved with what's exciting at MIT, so they become alienated from the routine fare of lectures, recitations, and labs. The Task Force envisions students spending 20 to 25 percent of the time during their undergraduate years doing some significant work with a faculty member.

Many of the details for the Educational Division still remain to be worked out. The scope of the Division would transcend the curriculum development now done at the Education Research Center, to include such subjects as developmental psychology. The Division would not have a policy role; rather, it will work with faculty on more of a consulting basis.

Such a task force was originally planned to receive recommendations of the MIT Commission and submit specific proposals the faculty could vote on. However, its policy-making significance has become much greater becuase of what a large number of top faculty and administrators see as the failure of the Commission to come up with any workable recommendations at all. Plans for a final report of the Commission have reportedly been abandoned, while the Task Force has apparently rejected outright its proposal for a First Division to oversee freshman and sophomore years.

There were no students or junior faculty on the panel. Its composition thus resembles more the Lewis Committee, which put forth comprehensive policy recommendations 20 years ago, than any of the broad-based groups which have sprung up recently.

Student voter status is hazy despite ruling

By Robert Fourer

Student voting rights in Cambridge were still unclarified last week, despite the recent statewide standards established by Attorney General Quinn.

The Board of Cambridge Election Commissioners, following its initial reaction that Quinn's ruling was "just an opinion," as one official put it, has decided now to await a judgement from City Solicitor Phillip Cronin, who is due back from vacation early next week. In the meantime the Board will continue to apply its own residence standards, with each disputed case to be decided separately at a full hearing.

In Boston, meanwhile, the Election Board voted 3-1 to accept the new decision.

Quinn's ruling would permit a student to select his own domicile for voting purposes, regardless of whether he lives in a dorm or fraternity, or whether his parents support him. Domicile for voting purposes was defined by Quinn as "actual residence in the town, coupled with an intention to remain indefinitely. The intention to remain indefinitely does not mean an intention to stay forever but merely that there is no present intention of leaving."

Thus the way would be cleared for almost every college student who wished to vote in the town where he attended school. Registration deadline for the November 2 elections is more than two months away, leaving ample time even for those away on summer vacations. Freshmen will be ineligible, however, since they will not have been residents for six months by election day.

If the ruling is upheld – and there seems little chance it won't be – students will comprise at least 25% of the eligible voters in seven of the state's communities, including Cambridge. In 17 more, including Boston, they will make up more than 10%.

Student voting has especially great potential consequences in Cambridge, where there are currently 45,000 registered voters out of a possible 80,000 under the new ruling. Of the 35,000 unregistered, it is estimated that 20,000 are students. Cambridge's nine city council seats and six school board memberships will be contested this November. Under the city's proportional representation system of voting, as little as one-ninth of those actually casting their votes can elect a councilman, so organized students could possibly elect one or two representatives of their own.

With the increasing pool of potential voters have come stepped-up efforts to get them to register. Coordinating most activities is the Cambridge Committee for Voter Registration, which was instrumental in bringing the case for student registration to Quinn's office. It had registered over a thousand new voters before the ruling, and has also worked to demand evening registration hours (in August the registrar's office will be open Thursday nights 7-9 pm).

If the city continues to balk at Quinn's opinion, the issue will go to the courts. Several test cases are already pending, and their disposition may be speeded up to clarify the rules before election time.

'Job award' recipients seek work at Institute

By David Searls

This year, some 1700 undergraduates found "job awards" in their MIT financial aid packages – a euphemism if there ever was one, for these students do not receive an award (as the word is usually understood), nor are they even guaranteed a job.

Daniel Langdale, MIT's Director of Student Personnel, explained the student employment situation for *The Tech*.

"The job award is part of the standardized financial aid program, by which every student with need must borrow and earn the same amount – $1000 for the loan and $600 from their work – while their scholarship makes up the rest.

"We're now in the second year of this equity program; before, the amounts were determined by merit, athletics, and such, as they still are at most other schools. The hangup with this merit program, we found, was that we tended to predict success, and we realized that we didn't really know what success was. You could have a student with a 4.5 average who wants to become a theoretical physicist, and another 3.3 student who's really biting the bullet to stay in school to become a high school teacher; and he might turn out to be a far better teacher than the other guy would be as a physicist. How do you decide?"

Langdale stressed that students receiving job awards still had the alternative of supplying the $600 with outside loans. A good portion of the total opt for this plan, and there is a significant amount of switching around during the year, according to Langdale.

"If a student had trouble holding down a job, I wouldn't hesitate to tell him to look for a loan instead. After all, it makes sense to borrow – why make $2 an hour in 1971 when you'll be making $6, $7, or $8 four years later? And if you can enhance your earning ability when you get out by, say, taking an extra course a term, then borrowing is not an unwise choice. Still, there are other considerations, and I'd be uneasy about biasing a student one way or the other beforehand."

Langdale elaborated on the services provided by the Student Personnel Office.

"The way we help is actually pretty limited – it boils down to serving as a sort of clearing-house. We distrubute a handout to make sure that new students are made aware of employment opportunities on campus, which basically consist of working in the dining halls, the dormitories, and the campus libraries. Each of these has its own hiring service – the dining halls, for instance, send cards to freshmen, and the libraries have sign-up sheets in the student center – so that our function is basically informative. The rest of the jobs we handle are small; we hire a couple of guys a year, as does Admissions, but these are tough

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D-Lab spin-off stalled until after July, 1972

By Alex Makowski

Divestment of the Draper Labs will probably be delayed past July 1972.

At this time last year, MIT officials were talking confidently about a July, 1971 dissolution of the long-standing ties between the 25-year-old defense-oriented division of MIT and the Institute.

Now, sources close to negotiations between MIT and the Department of Defense say that while a July, 1972 split is still feasible, only "optimists" believe that devestment can take place at that time. The heart of the problem has always been, and still remains, money.

The Draper Labs have an annual budget of about $50 million, which is close to one-fourth of all expenditures at MIT during a fiscal year. The Institute receives about $9.5 million a year in overhead charges to organizations contracting the Labs to do research.

Of this sum, $5 million eventually supports MIT activities only peripherally related to the day-to-day operations of the Draper Labs. For example, since part of President Jerome Wiesner's time is consumed by decisions pertaining to the Draper Labs, a portion of his salary is paid by overhead charges from the Labs. In the same way, a portion of the expenses of the MIT library system (and those of almost all other activities at MIT that relate to the Labs in any way) are charged off against overhead revenue. While such measures are bookkeeping devices, they represent a large

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Engineering in the Northwest: no jobs yet

By Paul Schindler

They still hire engineers in the Pacific Northwest; as many as several hundred a year. Except for Aero- and Astronautics, the employment picture for the recent college graduate is not bleak in Seattle and Hanford, Washington, or in Portland and Albany, Oregon. There are bad spots in the picture, and some engineering specialties are doing better than others, but the situation is not as black as it might be, based on Boeing's recent experiences.

Boeing has made massive layoffs in Seattle over the last three years, and by 1972 they'll have laid off 70% of their 1968 work force. Residents blame Boeing for Seattle's problems, while Boeing blames the general economic downturn and now lost government contracts. In the rhubarb over the SST, many people lost sight of the fact that although Boeing sold almost 100% of its product to the U.S. government in 1955, it's selling 80% commercially today. Thus, according to Peter Bush of Boeing public relations, "... the recession reduced seat miles flown in this country, so the airlines stopped buying. We're working off our order backlog now: it was $5 billion in '69, and now it's down to $2 billion." The company hopes for an upturn before the backlog ends.

In addition, the 1968 peak was, according to Bush, unusual. "We were in the development stages of both the SST and the 747, as well as full scale production of the 727, along with our NASA work, which was peaking. Even if there hadn't been a downturn, '68 would have stood out as a peak employment year."

The company has already released 6,700 engineers, and expects to trim another 3,500 by the end of the year. They have also trimmed 80,000 other employees. By category, the engineers doing the best were electrical/electronic engineers, only 20% of whom will lose their jobs.

Boeing is now developing a more diverse product line, which, the company hopes, will be able to take advantage of the corporate and individual skills which it has built up so carefully over the years. Home building and city planning, electronics, time-sharing, surface transportation vehicles, air cushion cars, hydrofoil boats, containment of oil slicks, dousing of forest fires, and desalination of sea water are among the company's immediate prospects for such diversification. Less than 10% of the company works in these areas now, but by the 1980's, Boeing plans up to 1/3 of its corporate sales in "non-traditional" lines.

That doesn't do much for engineers over the short haul however, and no one at Boeing wants to predict the future to any extent. But, prospects for immediate re-employment in non-aircraft jobs seem unlikely to Boeing Vice-President Lowell Micklewait, who told Congress "... jobs do not exist for these [new, non-aircraft] purposes now ... The need may exist, but the funds or the buying mechanism do not exist."

Professor James W. Souther, University of Washington Placement Director, agreed. He said: "There is a future in engineering here, as elsewhere in the country. Urban decay and socio-economic problems need to be solved with technology. But, over the short range, there is bound to be some disruption as priorities are changed ... The supply and demand for engineers will be close during the '70's, but there will be shortages again during the '80's."

He agreed that Boeing depressed the job picture for UW graduates, but pointed to ailing aluminum, paper products and university employment as other trouble areas. As a result, 60% of the UW engineering graduates stayed in the Northwest in '68, but only about 45% will stay this year; 2% were unemployed in '68, while 17% will not find jobs during '71. Civil, mechanical, and electrical majors are doing better, while chemical, metallurgical and aeronautical engineers are having a hard time. Changing to a non-science field doesn't help however, Souther pointed out. These fields offer even less.

The Port of Seattle is in the process of becoming the containerized freight center of the Northwest, and is keeping its own staff busy. As one engineer put it, "We are looking for some engineers. Engineers who can figure out how to remove old docks and piers and replace them with container freight storage lots; engineers who can help fix the rotten piers this building is built on. But we don't need too many."

Oregon, with half the population of Washington, has something less than half its engineering employment. There is a vibrant and growing engineering community, but no central focus on the scale of Boeing. Outside of the utilities and the telephone company, there are very few single large employers of engineers. But, the overall employment picture for Oregon is much better than in Washington, and engineers here are doing better than the general working population.

Civil, mechanical, and marine engineers are being hired in the greatest numbers, but the employment is diffuse, and although there is some expansion, it is not very vigorous. The state's major industry is forestry (along with agriculture) and the roller-coaster market has a direct effect on that industry, through housing starts. Thus, the local economy is dragged down, faster than the national, but not as fast as Seattle. Lumber doesn't affect national-sales oriented firms however, and the greatest number of engineers in the physical science areas are employed at one such firm, Tektronix, Inc.

Tektronix is located in Beaverton, which is a suburb of the state's only city of any size, Portland. Exact figures are not kept, but the firm, a major manufacturer of precision oscilloscopes for government and industry, employs several thousand engineers in such diverse areas as design, manufacturing, marketing, and administration. Payroll for engineering is 10% of annual sales.

Unlike Boeing, Tektronix, when faced with a cutback in orders to to the recession, "did not order massive cutbacks in personnel. Management here feels that it has an obligation to its employees. We are very probably over-staffed from an economic standpoint; there has only been a 10% decrease in employment, and that has been primarily from attrition," according to Ron Elrath in the office of Professional Placement.

Engineering, for just about anyone except an aeronautical engineer, can be your career field if you want to live in the verdant Pacific Northwest. But maybe not right away.

'Job awards' no bargain

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for freshmen to get, since there are usually upperclassmen waiting in line for both this kind of work and laboratory jobs. We will be in touch with MIT employers during August, though, if they aren't full."

Langdale pointed out that there is really no formal employment service in the Institute; the closest thing to an agency is the bulletin board full of job openings that is maintained in the Student Personnel Office.

"As I say, we're essentially a clearinghouse, but we do respond individually, so we're not really like an employment agency. We are isolated to the point where employers know of our existence, though we don't prod them. I think it's safe to say that we hear of every job not filled in the normal way.

"We encourage freshmen to talk to their advisors about finding work in their department, and we tell them about other people to see. I do occasionally try to find jobs for people having trouble, but I'm usually frustrated – I seldom turn something up. Guys like me in other schools hire and fire, but we don't – it's really a matter of the bulletin board, and a few lists that we take for jobs like babysitting, typing, programming, etc."

The unique aspect of the Student Personnel Office's activities is that the services it provides, such as they are, are not limited to students with financial need. Langdale pointed out that this is in keeping with the philosophy of the Institute, also evidenced by the equity program in financial aid.

"This is now public Institute policy. At times, though, we find ourselves waging an internal battle with our own policy, in that some feel that our efforts ought to be restricted to the area of financial need. But the Institute's attitude is that employment is not like a scholarship – a job is part of the fabric of life around here, and ought to be available to all."

Research jobs are indigenous to MIT, and, when they pay, are generally preferred by students. Most of these jobs are individual arrangements between professor and student, where wages (if they exist) are paid through "contract" money that the professor has obtained for a project. Beginning this year, however, a number of paying research jobs will be opening under the auspices of the Undergraduate Research Opportunities Program.

The program, which began two years ago, has been operating successfully on a basis under which no wages were arranged by UROP, but which provided for funding "to offset direct out-of-pocket expenses accruing to [the student-faculty team's] collaborative activity."

This year, however, UROP is instituting a program by which students may directly receive wages of up to $600 for the year (through discretionary money that was freed this year by Sloan and Land funding, earmarked for "educational innovation"), in addition to laboratory or other expenses.

The program is being administered by Prof. Margaret MacVicar of the Physics Department and Amy Metcalfe, who described the employment aspects of the program for *The Tech*.

"The $600 maximum was set purposely to correspond to the amount required in the financial aid package for the job award, though the program isn't necessarily limited to students with need. It's our hope that students will be able to continue working when the $600 has run out, with additional money coming from a faculty member, if he's effective at the work. That's why it's important that the student be looked at as a junior collegue, which is actually the goal of the program.

"It should be emphasized that this is geared to freshmen especially, and to sophomores. The reason for this is that these students are undesignated, and in a kind of shopping period – they really have very little idea what they're getting into – and what better way is there for them to see if they're looking at the right field? As a matter of fact, the departments use the program as a kind of recruiting device; which is why the booklet which describes the various opportunities (mailed to all freshmen) has doubled in size in the last year."

Mrs. Metcalfe also pointed out that the program, which replaces the old Petition Grant Program of previous years, has no need test involved in the decision process.

"I want to stress, though, that we have only a very limited amount available, so new students should begin looking for a professor to team up with as soon as possible. The application will then be made through the department, either through the head or the department coordinator.

"Freshmen shouldn't get discouraged if they're turned away at first – new students seem to have a block about bothering faculty. The jobs can start anytime, so they should keep working at it. If somebody finds everyone rejecting him, though, I'd love to hear about it."

The form of payment in the program is yet to be determined – an alternative to paying wages on the basis of hours worked would be a system of grants. Besides having possible advantages from a tax viewpoint, this form would be more to the liking of some professors and departments, who foresee an awkward student-professor relationship with the wage system (for example, a greater fear of making mistakes, however pedagogical they might be). Also, it is hoped, the student would be less likely to end up "washing test-tubes."

Mrs. Metcalfe also emphasized that the interpretation of "research" would be very broad.

"The program is very definitely intended to include the 'soft' sciences – humanities, economics, political science, and so on. As a matter of fact, the departments that used the most money last year were Architecture and Urban Studies."

Students in last year's UROP program received pass-fail credit instead of pay, an alternative still open to students and professors who prefer it. Credit is awarded in xx.UR (where xx is the course number), and can be applied toward the Lab Requirement by petition to the Committee on Curricula. It may also be taken along with pay on a half-and-half basis. These options are encouraged by UROP, in light of the limited amount of money available.

D-Lab spin-off stalled until after July, 1972

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source of income for the Institute.

Draper Lab employees are *The Tech's* prime source of information.

One person within the D-Lab financial structure stated he thought the Department of Defense did not want MIT to divest the Labs, and was "pressuring" the Institute not to carry through this course. The main manifestation of this pressure, he said, was a very hard attitude toward still-unresolved negotiations with MIT. Should MIT's position be substantially adopted, one person speculated that it would cost the Department of Defense up to $60 million over the next 5 to 6 years.

MIT is seeking compensation for the $5 million per year overhead losses, while the Labs would require an initial DOD capitalization of about $25 million in order to operate after severing ties with the Institute.

Seeking to verify this information, another reporter spoke to Vice President for Special Laboratories Albert Hill. He said that DOD understood MIT's problem and realized that it had to help universities who ran into difficulties because of previous work for the department. The negotiations were proceeding as smoothly as could be expected, he said. "We're just trying to narrow the gap over compensation."

Given the Institute's public commitment to stay below a $10 million deficit over the next three years, divestment of the Labs seems unlikely until DOD and MIT agree upon some method of compensation for the lost D-Lab revenues.

The Labs supply a gross revenue of about $50 million per year, which is about one-fourth of MIT's yearly income. On-campus research, the Lincoln Labs, and teaching functions provide the other portion of the budget. Each segment also contributed about $50 million.

CANNED: Student Center Dean Jay Hammerness, above, was dismissed from his job last spring, apparently due to friction with other members of the Dean's Office staff. Students angered by his tactics had many times wished they could get him fired, but apparently his unpopularity had nothing to do with the decision. His successor will be Jon Hartshorne, 30-year-old former Director of International Student Services at Texas Technological College. He reportedly "welcomes visits from students."

Money squeeze grips MIT

By Joe Kashi

Money at the Institute continues to be tight, as plummeting scholarship and loan awards have already indicated to many hard-up MIT students.

"The key to financial stability in the universities is assured funding by the Federal government," states MIT Comptroller Paul Cusick. This funding, he said, follows a cycle that nosedived about two years ago. Some think the cycle is short-range, about five years in length, and consequently will rise shortly, while many others think its period is about ten years.

One problem is that the universities have not made a full disclosure of the costs of graduate education. Much of these costs have been absorbed in the past by research grants. But now, new research contracts are not keeping pace with inflation and graduate education has suffered. Such financial pressures have indirectly resulted in a declining graduate enrollment at MIT which in turn further increases teaching and research costs. The biggest squeeze is in the Institute's declining ability to award graduate fellowships: 150 more grad students, who last year would have received fellowships, will now have to pay their own way.

MIT is not suffering as badly as some other private universities as unrestricted interest from endowments is still available to cover deficit spending. This may not last much longer, though. While MIT's endowment is now about $450 million; about half is earmarked for pension funds and consequently unavailable. Of the remaining $200 million, many bequests have so many restrictions attached to them as to render them useless for general purpose funding.

On-campus research grew by about $3 million last year, almost enough to keep pace with inflation.

Cusick feels that many private universities may either have to close or become state universities because of their financial plight. They have depended upon federal funding to such an extent that recent cutbacks in Washington have left them surprisingly vulnerable.

The Ivy League schools, with the exception of Harvard, are all in precarious position because of huge deficits. Surprisingly, small, four-year, liberal arts colleges are in the best financial condition of all because about 80% of their budget is generated by tuition rather than uncertain research funding. By contrast, $175 million of MIT's operating budget of $210 million comes from external sources. Only 10% of MIT's teaching costs are paid by tuition.

Defense Department research at the Institute has continued to drop, as many of the major projects are being refunded through the National Science Foundation as a result of the Mansfield Amendment.

Basically, MIT is in a transition stage from a period of sustained expansion to one of steady and stable budgets. This will necessitate selective reduction or elimination of activities rather than the sweeping general cutbacks which have been made during the last few years.

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announcements

* The following Undergraduate Seminars, described in the Freshman Handbook, still have places available: 021, 022, 023, 025, 026, 02A, 052, 053, 067, 131, 163, 161, 171, 203. Freshmen wishing to enroll should write to the Freshman Advisory Council, Room 7-133, or stop in in the fall.

Four additional Undergraduate Seminars, described briefly below, are also available. Contact the FAC for more details.

SEM 085 FUTURE SHOCK: Investigating How and Why People React to the Quantitative, the Scientific, the Mechanical and especially the Computer
Miss Hannah, Professor Zacharias

Investigation of the nature of and reasons behind negative reactions to science itself and the technological advances, hence social changes, it makes possible/necessary. The psychological reasons, things of security and phobias; the social reasons of education and order. What in particular is feared/distrusted/disliked about computers: automation displacing workers, "dehumanization," loss of control, invasion of privacy. How these attitudes came about; the bases they have in fact; controlling these dangers of computers; the possible dangers of paranoid reactions to them. Artificial intelligence research – the threat of machines thinking . . . what is its image, what is it in fact, how the image came to be, what are its actual worry – questions of goals, philosophy, ethics.

SEM 121 CHEMISTRY OF MASSACHUSETTS ENVIRONMENTAL WATERS
Professor Frey, Edmond

A water sampling and analysis project was begun during the Spring of 1971. We are measuring geochemical parameters in streams (Mystic, Ipswich, Parker, and Merrimack) as they progress from unpolluted areas to Boston Harbor and the north shore of Massachusetts. At the seawater interface our project is coordinated with studies of Boston Harbor and Massachusetts Bay in the Sea Grants Program. Ultimately our goal is to identify the sources and mechanisms important in determining the chemistry of water as it passes through the urban environment. New students will be expected to have an interest in acquiring a basic background in water chemistry.

SEM 204 NUTRITION, NATIONAL DEVELOPMENT AND PLANNING
Professor Scrimshaw

The seminar will deal with the world food, nutrition, and population problems and their relationship to social and economic progress in developing countries. The nature of the actions to be taken by both public and private sectors to avert future food crises will be considered. Participants in this seminar would have the stimulus and excitement of attending the International Conference on Nutrition, National Development and Planning, to be held at MIT October 19-21, 1971.

SEM 210 WAYS OF "KNOWING"
Reverend John Crocker

The aim of the seminar is to provide a forum in which students may examine explicitly and critically their assumptions about the ways in which they perceive reality (things, persons, life). Different ways of "knowing" (epistemological questions, "objective" versus "subjective" approaches to reality, the place of assumptions or "faith" in the process of "knowing") as they relate to science, philosophy, religion and one's life will be discussed in the light of other men's views, among them Hume, Ayer, Feuerbach, Nietzsche, Polanyi, Kuhn, Barbour, Marcuse, Brown, Buber, a number of theologians and others.

* Freshmen who have not done so may still send in Freshman Humanities Preference Cards, although teaching assignments are already in the process of being made. 83% of the class have stated their preferences, with by far the greatest number (28%) requesting 24.015 (renumbered 24.01 in the new Catalogue). 21.011, 21.013, and 21.017 each attracted over 15%.

Read any good handbooks lately?

This year's prospective seniors may only dimly remember it, but back when they were prospective freshmen the Institute generously stuffed an astounding variety of printed material in their parents' mailboxes. They received "Undergraduate Residence at MIT" from the Dean's Office, the "Activities Handbook" from Activities Council, "The Social Beaver" from TCA, 28 rush booklets, and a variety of helpful letters from the likes of Dormitory Council, Interfraternity Council, and Alpha Phi Omega.

None of these has entirely survived the past three years. "Undergraduate Residence" is the same in name only, the other two books are defunct; probably half the fraternities don't produce rush books any more, and other student mailings are less frequent as well. Meanwhile, the Dean's Office has spawned the "Freshman Handbook" and "How to Get Around MIT," two weighty volumes (the latter of which won't be ready till September).

Today's freshman is no less deluged with reading matter, it just comes in different forms and mostly from the Dean's Office. This change in form has been accompanied by some changes in content, and some at least implied changes in policy which have received less than their share of attention.

Freshman literature on residence has never been thoroughly adequate – which is to say, you can't convincingly decide on your favorite fraternity or dorm from summer reading. In fact, without talking to upperclass residents it's hard to define even simple preferences. Three years ago standard advice for choosing which fraternities to visit was to throw the rush books at a wall and pick the ones which fell face up. Back then, at least, the Dean's Office booklet showed floor plans for the forms, with rents for each room. And rush books were big enough to include some indication of living conditions, and make clear a few variations in emphasis.

Now, with rush week no longer fully independent of academic orientation, and money tighter, the freshman needs more information, and gets less. The new "Undergraduate Residence" has two pages for each dorm (no floor plans) and one for each fraternity. In varied ways, most of them say the same thing: "You've got to come talk to the brothers and look around to know what our house is really like." There's barely a minimum of specific facts – costs and living arrangements – which are the only things that *can* be elucidated in print. Fraternities do send out such specifics on their own, but the coverage is still incomplete, and without a uniform reporting system housebill estimates are hard to evaluate.

One would have expected just the opposite of a unified housing booklet – it ought to have aided collection and standardization of useful facts. It still would, if there were anyone to do the work. Coordinating 40 living groups is not something a person will do without pay, or concurrently with a full course load. Doing the job thoroughly and to everyone's satisfaction would require some addition to the Dean's Office payroll, not to mention office space.

Then again, residence selection assistance might safely be left as is. What's needed here is a policy reevaluation – a weighing of advantages and drawbacks, costs and feasibilities.

The important point is, it takes extra workers just to make policy. That MIT tends to ignore this, to value action more than evaluation, has been noted in not a few contexts.

The Freshman Handbook, for instance – an omnibus explication of MIT educational policy – cannot be fully reevaluated in any year, because the FAC staff does not have the time. And needless to say, they haven't the time (nor the power) to examine the Handbook's policy implications. Yet rapidly acceleration has made frequent reevaluation necessary, which is precisely what made the Handbook format desireable to begin with.

Thus the recipient freshman doesn't get all he might. The section on Residence/Orientation Week has been given a more reassuring tone without any basic modification in content – so it fails to reflect sharp changes in living group attitudes over the last few years. Passages urging the freshman to *please talk* with people to relieve any anxieties about his academic program are hardly reinforced by the restrictive humanities selection methods. And the whole organization of the academic sections promotes the supermarket model of MIT, which is rapidly falling out of favor among Institute educational planners.

Nonetheless the Handbook theoretically is an excellent administrative educational device. It provides a unified format for letting the new student know just what he faces – for making the "hidden curriculum" more explicit. It's just that it doesn't fully work without careful evaluation relative to established overall goals – which is to say, it requires employees who are given time to do more than paste together pieces of last year's effort and change dates and subject numbers. In effect, the Institute has authorized a valuable tool, but has hamstrung it somewhat with a lack of appropriations. (Admittedly, in all fairness, even the present Handbook is a great improvement on the state of things a few years back.)

But there remain policies to be set, evaluations to be made. At the very least, the expected value of such man-hour-eating decisions ought to be weighed against other priorities, to determine if unneeded effort is being spent coordinating less vital tasks.

No matter what its organization, the Dean's Office is unlikely to lose its ability to proliferate the printed word. It should be worth testing the value of putting more thought into deciding what to print.

orientation activities for your parents *during* R/O Week; you will be informed of any final plans over the summer.

Two final notes: First, be sure to bring enough cash to cover meals and a reasonable amount of unanticipated expense for the first ten days. Second, if you must arrive a day early, there will be temporary accomodations available on Thursday, September 2; Clearing House people will be present then to help you.

14.3 THE RESIDENCE DECISION

The first five days of R/O Week are organized around your selection of a living group. You will have a chance to meet people in the fraternities and Institute Houses where they live, ask questions about costs and living conditions, and enjoy a few parties and free meals along the way.

Men have a greater variety of choice than women–reflecting M.I.T.'s predominantly male enrollment–but presently there are about half a dozen coeducational living groups of all types seeking freshmen of both sexes, in addition to the one women-only dorm (McCormick Hall). The description below is intended to help you to the extent that you have not already decided on a residence over the summer. Even if you have made a decision, or have narrowed your choice to the point that you expect it to be fairly easy, you should still arrive on Friday for there will be other things for you to do.

The most visible activity during these first days is "Rush Week"–a program run by M.I.T.'s 29 fraternities, who must find new freshman members to fill the places left by graduating seniors. Rushing, the process of selecting and being selected by a fraternity, occurs in a few basically simple steps. After a general Pre-Rush meeting Friday night, fraternities are free to invite freshmen to their houses. Beginning Sunday morning, they may give out "bids," which are invitations to freshmen to live with them; freshmen who receive bids may accept them, or "pledge," any time after Monday morning. These procedures are governed by fairly specific rules which will be explained to you in other material you receive over the summer and on the day of your arrival.

While this may seem a short period in which to make such a choice, experience has shown it is sufficient if you prepare yourself and use the time well. Over the summer you will receive the booklet *Undergraduate Residence*, containing self-descriptions of living groups, and a number of "rush booklets" from no more than five or six houses to visit on Friday and Saturday–you won't have time to see many more, if you're going to stay and talk to people. On the first two days, before bids go out, most houses are happy to accommodate anyone who wishes to visit. Feel free to accept invitations of meals or lodgings for the night. Even if you're not too interested in fraternity life, it's worth getting out for a day or two to see what it's like.

If you receive one or more bids Sunday, you will have a day to think over them before you can pledge; in the meantime you will probably want to revisit the houses for a closer look. You can wait longer, of course–bids must be open at least till the end of the week. If you haven't received a bid by Monday and are still interested in joining a fraternity, you needn't give up–not all houses are filled with Sunday bids. You can visit houses as late as Monday, and bids are sometimes extended on Tuesday. Inquire at the Clearing House if you wish to know which fraternities are still seeking members.

By Sunday you should also be thinking about choices among the dormitories (officially known as "Institute Houses"). There will be Rush Week programs in dorms, too–though less intensive ones, since the residents do not depend on attracting freshmen. You should make plans to get to know at least some of the dorms in the same way you become familiar with the fraternities, by reading the descriptions you receive over the summer and visiting people in the dorms in which you think you might want to live.

You will be given an Institute House preference card to fill out by Monday night, on the basis of which you will receive a dorm assignment on Tuesday. You can then move to a permanent room there if you do not join a fraternity.

The process of choosing a living group can be unnerving at times, but on the whole it should be

To freshmen-to-be:

Want to join MIT's undergraduate Journalism Program? We have a Visiting Professor of Political Science who was a Senior Editor of *Newsweek;* he'll be here for one more year and will conduct a seminar on journalistic writing. Then there's Daniel Ellsberg, of course, who *may* be here next year. And 21.103, The Writing of Poetry – would that help?

You don't need a freshman handbook to guess that about the only thing journalistic and academic enterprise have in common around here is their proclivity for turning out great hunks of printed material. In other respects, the fledgeling writer, editor, layout artist or whatever is left pretty much out in the cold.

Nonetheless, the coming year finds us with no less than three student-run newspapers, a magazine or two, and the promise of numerous other less regular efferts. Not to mention MIT's own news sheet, edited by a paid staff in the office of Institute Information Services, and the alumni magazine which not infrequently buys stories and photos from students.

The Tech is put out twice weekly during the school year – more frequently than any other Institute publication – and offers the greatest range of resources and opportunities. Even a short summary of our activities covers almost every aspect of publishing.

Writing: in *The Tech* it comes in many forms, as a glance through this issue will show. Our staff is unpaid, but competent writers and editors with MIT backgrounds are few and far between and with a couple years' experience may start selling their work to professional publications.

Makeup: newspaper layout is one of the most intricate forms of functional graphic design. It leads to many jobs – one staffer was hired by MIT to design the books sent to freshmen this summer.

Production: we have a fully equipped cold-type composition shop, employing an IBM Selectric composer. The shop sees a considerable amount of work in addition to our own paper, offering staffers some of the best paying student jobs at the Institute.

Business: our operations demand several people to oversee billings, negotiations for printing and supplies, and circulation. All advertising sales earn a commission.

Photography: print media are among the heaviest users of photography. We have a large, professionally equipped darkroom, which staff members may use for their own work as well.

Our large offices on the fourth floor of the Student Center are convenient to much of the Institute and make a good place to leave your books, stop for lunch, or stay the night if the weather turns bad. You can buy Coke from our machine at a penny an ounce.

If you find this short description intriguing, we urge you to write one of our editors over the summer (at P.O. Box 29, MIT Branch, Cambridge, Mass. 02139) or stop in during R/O Week – common experience is that once coursework begins in earnest, it expands to fill all time not otherwise committed.

In any case, welcome to MIT. Good luck.

"People around here won't change unless you give them something to change into."

"We must select a future adequate to our needs."

are you a mens or a manus?

Introducing MIT

(For the second year we are pleased to present a series of excerpts from one of MIT's numerous "Get Acquainted" booklets, which the Institute publishes in the interest of providing "a quick, realistic picture of MIT," as the Director of Admissions succinctly phrased it in a letter printed in this paper last year.

Though we regret that Dr. Greeley did not find our first effort "constructive," we do appreciate the constructive criticism from his office, which, we hope, has enabled us to do a better job this second time around.

We note with interest numerous revisions in the latest edition of the booklet at hand, including the disappearance of several of our favorite sections. In turn, we have revised much of our work, and are confident a careful reading will reveal constructive criticisms throughout.)

Page 2. Introducing MIT: "The Massachusetts Institute of Technology is a corporation devoted to research and training in the mutually supportive roles of university, defense contractor, and modern corporation. Its growing breadth is in wide response to the trend toward successful conglomerates in many fields. In a very real sense the Institute is an expression of the interdependance of many factors controlling our present-day society, to the extent that this makes sense . . .

"The undergraduate men and women are immersed in a dynamic environment with the option of disaffection or departure, decided by the student in close consultation with faculty advisors. MIT recognizes that most students are likely to be most productive if they are contented; thus the Corporation tolerates great freedom of experimentation with drugs, sex, and student government."

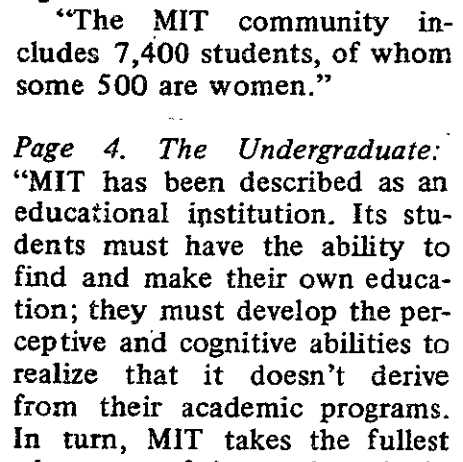
"The firm commitment MIT has made to the final solution of complex problems is manifest in the evolution of expertise in counterinsurgency, urban renewal, defense systems, and pollution."

Page 3. The Community: "MIT is a centralized university which takes advantage of its urban environment in every possible way. The Institute combines the benefits of an insulated campus with full advantages derived from the Boston area and its cultural, historical, military, and technical facilities. . . Within a radius of three miles are scores of universities with which MIT amicably competes for land, housing, and control of local governments. . . A few miles farther away is Wellesley College, with which MIT has reciprocal cross-pollination privileges."

"The MIT community includes 7,400 students, of whom some 500 are women."

Page 4. The Undergraduate: "MIT has been described as an educational institution. Its students must have the ability to find and make their own education; they must develop the perceptive and cognitive abilities to realize that it doesn't derive from their academic programs. In turn, MIT takes the fullest advantage of its student body with $4,900 yearly tuition and fees. . . A powerful curiosity about things not understood permeates every classroom."

Page 5. Undergraduate Academic Programs: "Students who enter MIT have been preselected for their technocratic potential. . . At the same time MIT recognizes its responsibility to provide a liberal patina of humanities and social science. . . Emphasis on fundamentals and getting things right are central to MIT's educational philosophy. A strong



sense of the quantitative, a critical analysis of the cause of defects, and a demand for precision motivate learning at the Institute."

"The curricula tend toward broad rather than narrow specialization. To this end, MIT's academic program may be flexed and open-ended."

"Today, the increasing reaction of science and its application to industry and government is reflected in MIT's research in management, economics, political engineering, mass and abnormal psychology, city planning, and military science, based upon the traditional income from industry and government—still the dominant 'majors' here. The scope of MIT has always been wider than its title 'Institute of Technology' might suggest.

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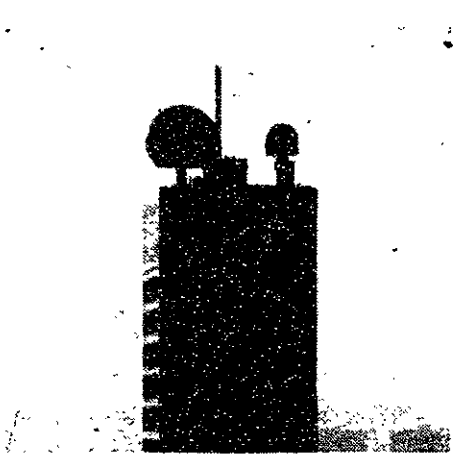

"It's easy to be swept away by the sheer force of MIT's reputation; to let it become your master; your outlook on life. I speak from shocking personal experience."

books:

Edge of History

By Bruce S. Marten

AT THE EDGE OF HISTORY, by William Irwin Thompson. Harper & Row, $6.95. 163pp.

"In straining our industrial technology to the limit, we have, in fact, reached the limit of that very technology. Now as we stand in the shadow of our success, there remains light enough to see that we are approaching a climax in human cultural evolution."

Population, pollution, depletion of natural resources, and the breakdown of all our social, political and cultural institutions — simultaneously — have raised grave doubts about the continued viability of our civilization. Here at MIT, Prof. Jay Forrestor — as outlined in his book *World Dynamics* — has even computer-modeled the apocalypse. We shall run short of fuel. Or we shall pollute the air too much, or generate too much heat in the process of industrializing underdeveloped nations. Or overpopulation will lead to famine even in the developed nations. Or we shall avoid these disasters through sophisticated management, but at the price of creating a society tyrannized by its own organization, against which the young shall rebel even as many are already rebelling. Or —

Many grave possibilities. At the edge of history, where the future is taking shape, we can see little except that we cannot go on like this. A radical transformation must soon overtake this world, either because of disasters or through the conscious application of measures designed to prevent them.

The dimensions of this coming transformation are in part the subject of William Irwin Thompson's book *At the Edge of History* — but only in part, for although he is concerned with outlining the shape of the future, his first interest is with the *imagination* of history, and how it affects society and individuals. The idea of history — what has been and what shall be — is a crucial chunk of society's *mythos*, that body of unquestioned value assumptions (beliefs, or ideology, if you prefer) upon which people in that society base their actions. Expressed or implicit, such a mythos is at the core of every culture, even our own supposedly rational, technological one. The shortcomings of the mythos of technology, with its implicit faith in the rational mind and man's ability to master any nature including his own, are only just now being revealed as the environment demands ecological redress or takes revenge on its abusers; as human nature seeks refuge from mechanization in neo-Luddite revolts against the liberal technological state, technology itself, and technology's midwife, science.

The mythos of technology is a primary social force in our world, and it is the primary theme in Thompson's book. Because of this, *At the Edge of History* is an especially important philosophical work for anyone who works in or is concerned about technological institutions. By its subject matter and tone one senses the arguments are addressed directly to us. The chapter entitled "Getting Back to Things at MIT," in fact *was* addressed to us.

For William Irwin Thompson, historian, was an Associate Professor of Humanities at MIT in 1967-68. He did not get on well with the Institute, and left after one year to accept an associate professorship at York University in Toronto, feeling that Canada, somewhat at a remove from the American power nexus, offered a better setting for calm, detached scholarship. He left behind an essay entitled, "MIT and the End of Our Technology," which was published in serial form in the now-defunct student magazine *Innisfree* and the first issues of *Thursday*. Most of that essay is incorporated in this book. In the essay he described his frustration as a teacher of history at MIT, and his reasons for leaving. Humanities at MIT, he said, camouflaged the real purposes of the institution: to produce technologists.

"To the degree that the humanist succeeds in technologizing the humanities (by turning them into the social sciences), he destroys the humanities; to the degree that he ignores the technological world and teaches as one might at Cardinal Newman's Oxford, he ensures the conviction in his students' minds that the humanities are simply irrelevant to the mastery of our new complex society; to the degree that he succeeds in communicating the relevance of the traditional humanities to our society, he finds himself welcomed by the administration as valuable camouflage, and resented by his students, who correctly point out that while he makes a great noise, he is still powerless to affect the inhumane training of the whole Institute."

It is worth noting that MIT administrators who have read the book are scornful of Thompson's criticisms — not surprising since much of it is aimed their way — and that alone makes it worth reading. After all, this is the book of which Jerry Wiesner, MIT's president-elect, said: (and I must paraphrase since I cannot recall his exact words) "We bring these men here; we try to get them to understand what we want, and then they turn around and do *this*."

At the Edge of History is hung on a skeleton of personal history, Thompson's own from 1967 to 1970. He sets out, after receiving his Ph.D. from Cornell in 1966, "Looking for History in L.A." There, in the vast rootless supersuburb of southern California, he examines the experience of "the average citizen who has escaped the village mentality of the South or the Midwest [and] encountered in Southern California the freedom to find himself, or lose himself." Having torn loose from his old history, he must now find or invent a new idea of history. "When the megalopolis is too vast to be perceived meaningfully, the individual projects, against the chaos of his world, a new mythopoeic simplification" — and that can mean the paranoid conceptions of a right winger, a black nationalist, a Weatherman; the smug faith of a progressive liberal; the jaded hedonism of the swingers. In the absence of tradition, Angelenos create instant traditions: Nathanael West's "Sargasso of the Imagination" at Disneyland and high tables at the shiny new University of California at Santa Cruz. The interesting — and frightening — thing about these mythopoeic simplifications is that they are all equally wrong, since the social reality is too complex for anyone to understand. This puts the lie to an important tenet of the technological mythos: that man can live rationally by applying reason to his environment. In Dr. Forrestor's terms, social systems are "counter-intuitive," and

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Introducing MIT

(Continued from page 5)

Page 6. Specific requirements: "MIT divides degree pogroms into two parts: 'the part we make you take,' and 'the part we make you make yourself take.' Together, these account for about 100% of the curriculum. Each departmental pogrom includes rigorous training for participation in that field through service to the real world."

"Most students enter an area of major concentration sometime during their sophomore year. Later dilution is necessary but may invlove scheduling difficulties at inconvenient times. Within a department there is a major option, and the student can readily develop his own compartment or disciplinary program without the assistance of his faculty advisor.

"...many undergraduates work side by side with graduate students, performing their professors' research without pay."

Page 7. Project Interphase: "MIT requires a certain number of black, women, Puerto Rican, Mexican-American, and American Indian students to felicitate the reception of government funds. To this end, these students have been given a special summer program that permits them to 'catch up,' and to make a rapid transition from their native cultures to MIT... when it was determined by MIT that this course could benefit them..."

Page 10. Undergraduate Life: "Residence: More than three-quarters of MIT undergraduates reside in student residences on campus or in fraternities across the river. The remainder tighten up the housing market...All housing units are at least 20 years old, except new housing designed from 20-year-old plans...Fraternities are housed in buildings carefully preserved."

"All MIT housing units provide either their own compulsory food or nearby vending machines where 21 meals per week are occasionally available. Students must choose between compulsory commons meals and a 'club' plan under which they pay $50 per semester to forego eating...all residents of Institute Houses are additionally required to lend $50 interest-free to the Housing Office for the period of their stay."

"Dormitory rents keep pace with the rapidly rising housing market as dorm services are curtailed quarterly."

Page 11. Activities and Student Government: "In order to pacify those students not satisfied by drugs, sex, or the more common sublimations of the studious life, MIT provides a wide range of stupid activities, including several newspapers, mostly defunct...an AM/FM radio plays around the clock."

"The variety of activities is prodigious, catering to all known tastes, and more flavors are being discovered all the time."

"Student government, a powerless organization, is kept up by the Administration as a front in order to maintain that students control their own lives. Many students also endorse this belief."

Page 12. Government: "MIT is ruled by the Corporation, a board of businessmen, financiers, alumni and tokens. The actual administration of the Institution is left to the benign despotism of the Administration, an $8-million electrical engineering cadre. The faculty regulates student needs and carries the Administration's requirements in student discipline..."

"Faculty members must supply up to two-thirds of their salaries through research grants, mainly from the Department of Defense."

Page 14. Athletics: "For those who enjoy physical combat, MIT provides a host of alternatives to counterproductuive campus demonstrations. Last year, nearly 1500 students participated in rifle, pistol, karate, boxing, and 23 other sports."

Page 16. Applications Procedures: "Freshmen may enter the Institute only in September when, at traditional ceremonies, President-elect Jerome Wiesner will shake your parent's hand..."

"...Fill out the enclosed forms and enclose $30 application fee. SAT, NMSQT, and other tests of technocratic ability are required. In addition, admissions are affected by an essentially random personality rating assigned to all applicants by conservative alumni."

"Applications, together with all supporting materials, are due at the Athletic Office by January 15 of the calendar year of proposed entrance. The Admissions Committee completes selection of the freshman class early in the day, and most candidates are informed of their condition in early April. Other applications will be held for consideration with prejudice at the usual time in the spring. A student admitted under this plan is not required to reply."

"All candidates for admission will receive an application for 'Need Analysis.' Every student who wishes to be considered should return the application to the Student 'Aid' Center with a Parents' Confidence Statement."

"Arraignments for payment of all formal charges may be made with the Bursar."

Page 18. Financial Aid: "MIT's aid program centers on a careful definition of each applicant's

financial need by the Financial Aid Computer."

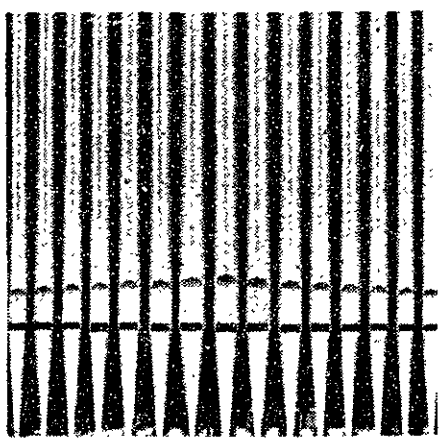
"The Institute is keenly aware that it would be elitist admit only students who can affort the $6000 yearly fees and dues (tuition has been increased since page 4 was printed), so low-cost loans and scholarships financed by major corporations are provided. In addition, MIT requires anyone receiving financial aid to accept 'job awards' permitting him to seek summer and term-time employment grossing $2000. Thus, those whose need is less than $2000 receive nothing..."

Page 20. Visits to MIT: "Members of the Admissions Office are pleased to find students in the vicinity between 9 and 5 every weekday except during paid vacations. Visitors should find the Admissions Office entering the Institute at 77 Massachusetts Avenue. Advance appointments are seldom necessary but often recommended."

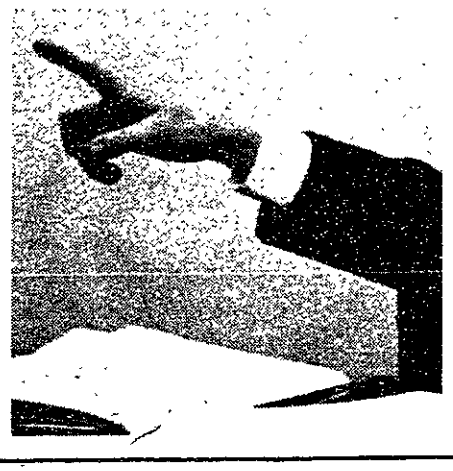
"Student-led Institute tours leave each weekday..."

Written inquiries and requests for unabridged copies should be addressed to: Director of Admissions, MIT, Cambridge, Massachusetts 02139.

—Wells Eddleman
Mike Feirtag
Bob Fourer



"So much new dope is given to the student that it is easy for an unhabituated freshman to go astray—not doing minimal work, not realizing how he has hurt himself until the first (midterm) quizzes. I speak from shocking personal experience."



"MIT doesn't hassle itself over individuals much. They're on your own, as far as life style goes."

Edge of History

(Continued from page 5)

henceforth we can only expect to deal with them productively by relying on computer models. Unfortunately (or not, depending on how much you like leaving things up to the IBM 360), as Thompson suggests, human beings will insist on having their own conceptions of the way things are, and we will stumble onward, each of us in the dark; — but each in a different dark. The myths we used to believe in have lost their grip, and new beliefs are coming upon us in bewildering profusion: political revolutionaries and Jesus-freaks; mantra chanters and superpatriots. Nathanael West suggested the outcome of these trends in his novella, *The Day of the Locust*: "There would be civil war." Thompson makes no dire predictions, but the cultural transformation is under way.

One facet of tomorrow's situation comes into focus in "Going Beyond it at Big Sur," in which Thompson follows the trail of hippies and a "new consciousness" to Esalen in the summer of the hippie, 1967. In this account of his experience at the now-famed Institute specializing in sensitivity and awareness training, Thompson shows himself to be a far more perceptive observer than Charles Reich, whose naive *Greening of America* propagated the new folk myth of the hippie triumphant over the repressive technological state — even as the hip scene was degenerating into a morass of drugs, mysticism and social withdrawal, underscored by a succession of disastrous rock festivals. Reich should be shamed, for as early as 1967 Thompson had discerned the weaknesses of the counterculture as well as its strengths. In the classic Greek tragedy scene Thompson employs, the hippies' unique excellence (*arete*), their sensitivity to emotion and states of mind, was inextricably enwound with their great flaw (*hamartia*): ignorance of the technology which made possible the leisure that spawned them in the first place. Thus the victory of the hippies over the technologists would be impossible: the hippies could continue indefinitely as a subculture as long as industrial society produced sufficient wealth to keep them fed, clothed and housed. They might move to the country and try to live off the land, but then they would be something other than hippies: they would be peasants. The more likely outcome would be that the cultures of the hippies and the technologists could not remain inseparable forever; if the freaks did not rise in nativistic and ultimately self-destructive revolts against the industrial state then some sort of mixing of the cultures would occur — and even now we see the beginnings, in hip capitalism and mod businessmen, and computer freaks at MIT.

After "Getting Back to Things at MIT," and a long groundwork-laying chapter on "Values and Conflict Through History," Thompson emerges in his fifth chapter with a scenario of "A.D. 2000," Scientific-Planetary Civilization. He is a hesitant prophet — World War III or any of several possible ecological/natural disasters could bounce us back to the Stone Age — but extrapolating a possible outcome of present social trends he describes "the millenium under new management": a super-technological world dominated by an almost priestly class of scientific-initiates and peopled largely by technopeasants who "cannot speak the sacred language of number." Despite his obvious antipathies to the Howard Johnson-style systems managers, Thompson foresees their ascendency. They will be more hip, or course; the environment will be spared its present abuse and social engineering will come into its own as "the progressive liberals return to reinstate the new Government of Youth." In their mod clothes and sensitivity-trained style, the new managers will understand the needs of a complex, post-industrial culture: the last vestige of puritanical America will be swept away and in the new empire they shall have psychedelic TV and legal pot. "Role conflicts, as between today's freaks and technocrats, will persist and must persist, for the roles in conflict in specialized societies *are also complementary*. Just as warriors require the enemy, so tomorrow's hippies will need the technocrats to provide worldly goods. The technocrats, for their part, require the services of media, to bind the body politic, entertainers, to relax them from their labors, and even humanists, whose function "will be to create a consciousness of human civilization." And among all these dissident yet complementary groups, just as in all civilizations before, a dynamic balance will exist — presumably one less destructive than the present one in terms of human lives and suffering. Thompson does not pass value judgement on his millenium. He leaves it up to us.

At the Edge of History concludes by reversing itself. Up until the last chapter all our attention has been focused forward, on the present or future; then, abruptly, Thompson invites us to travel to the *other* edge of history — the far past — to undertake "The Re-visioning of History." For if the imagination of history affects what we do, a new conception is bound to change our behavior. Now we are asked to contemplate a heady synthesis of historical scholarship, mythology, science and science fiction. How, for example, does one account for the persistence in all world mythologies of the story of the Flood? What accounts for the almost-overnight emergence of civilization in pre-Columbian America? Edgar Cayce, "the sleeping prophet," a Virginia mystic, whose medical advice given while in trance cured hundreds of people — cures which cannot be explained away — said that parts of Atlantis would begin rising around the Bahamas in 1967. J. Manson Valentine, in 1968, investigated the sightings of undersea quadrangles off Bimini, and found them to be ancient stone walls or roads, thousands of years old. The existence of Atlantis would explain a lot of things in our scheme of history, even as the neutrino explained a lot of things about the atom.

Myth, as Thompson explains, is not rumor, for myths in traditional society are sacred and their tellers do not change them around to suit fancy. There appears to be more to history than our "scientific" historians allow: Why, for example, was Immanuel Velikovsky so abused by the scientific establishment (even to the extent of harassing his publishers) for daring to propose his cataclysmic theory? Because Science, like the medieval Church, has become an institution with certain dogmas of its own: "Myths are simplifications of reality, but so are scientific laws, for they magnetize the infinite information of the universe into fields of their own

(Please turn to page 8)

Equalizer Project Interphase in third year

By Alex Makowski

Over the past few years such "prestige universities" as MIT have realized that their admissions policies and educational programs have forced a *de facto* segregation. During the late sixties it became increasingly clear that students from the poorer high school systems, if they could make it into MIT at all, were much less likely than the middle or upper class student to keep step with MIT's demanding pace. The fact that these deficient schools contained a large number of the nation's blacks complicated the problem with racial overtones.

MIT's attempt to equalize opportunities for all outstanding high school students began with a new admissions policy, a two-part program of increased recruitment and revised evaluations procedures. While MIT reached the school systems to urge that all motivated, intelligent students consider applying to MIT (even if their college board scores did not seem sufficient), admissions officers reviewing application material deemphasized low college boards if the student had demonstrated a high degree of ability and excellence within his school. The result was a dramatic increase in the number of entering black freshmen — from less than 10 in the fall of 1968 to some 50 or 60 each succeeding September — and a similar, if less noticeable, rise in the number of lower class whites and members of other minority groups.

But mere admission to MIT provides no guarantee of a successful four years. Students handicapped by poor high school backgrounds are bound to suffer in comparison with better prepared students more strongly grounded in the fundamentals of math and science. So at the same time MIT adopted changes in its admissions policy it began preparations for a special program, Project Interphase, to ease the transition from high school to college for this particular set of students. Held for several weeks each summer, Interphase is now in its third year. This session there are 35 students, of which 25 are black.

Assistant Dean for Student Affairs James J. Bishop, who administers Project Interphase, explained that MIT had geared these summer sessions to students who came to college motivated to study. This motivation makes any attempt at stimulation unnecessary. The program seems to be unique among Boston area schools; the nearest comparable project is at Brown University in Providence, Rhode Island.

The program has gone through an evolutionary process to reach its present form. The first year there were six subjects: pre-calculus math, physics, humanities, automatic computation (a computer course), a project lab, and communications skills. The first three were required; students selected a fourth as an elective. When students and staff reviewed the program following that first session, they decided there was not enough time during the summer for four courses. The computer course and project lab in particular suffered from the tight schedule. Additionally, the students predicted that future classes would show little interest in pre-calculus, review mathematics. The following year the curriculum was cut to the three basic subjects, and this summer chemistry was added as an elective.

About one-half of the Interphase students are taking the chemistry elective. Modeled after 5.41, the subject provides students with a headstart on the fall material.

The faculty handling the courses have been impressed with the students' capabilities and attitudes. Instructors in physics, chemistry, and humanities all reported their students working exceptionally hard. Some instructors have themselves profited from the special nature of Interphase by taking advantage of the possibilities for unusually close contact with their students.

As for the freshmen, they are little different from the regular MIT breed. Pre-occupied with credit hours and a heavy work load, they have reacted to their new environment in much the same way as the rest of their class will react this September. Some wish humanities weren't required; others find the physics a little dull; one suggested (whimsically, it seemed) that switching to music might not be a bad idea. They estimated that most of the students spend four or five hours a night on homework.

And they agreed with Bishop and their teachers that the program is worth the money (about $2,000 per student). Formal, statistical evaluation of the program is difficult, if not impossible; the Interphase group relies instead on meetings between faculty and students at the end of the summer and during the fall. This year a diagnostic test was given in physics as soon as the students arrived, so some measure of progress there will be possible. But there is no doubt in the students' minds that, if they had to face the fall term without the Interphase preparation, they would have a lot of trouble.

bridge: Making the most of losers

By Daniel Reinharth

One of the most important talents a bridge player can have is the ability to cope with each situation as a fresh entity. He must not dwell on the good or bad plays of the past, but rather make the most of his present situation.

In today's example, North, judging his hand good offensively but poor defensively, gambled by jumping preemptively to game. West's opening lead was the ace of diamonds, and when dummy was laid out declarer saw that he was going to have problems. He seemed to have four unavoidable losers: a club, two diamonds, and a heart.

West continued with the king of clubs, which South captured with the ace. Declarer pulled the trumps in two rounds, after which he was able to formulate a plan of attack which seemed to have some chance for success. These are the straws at which he grasped: (a) West bid two clubs, (b) the play of the king of clubs had marked West with the queen of that suit, thereby accounting for nine of West's presumed 11-14 high card points, (c) West led the ace of diamonds, but followed it with neither the king of diamonds nor with a small diamond (which would indicate a doubleton), indicating perhaps that he had no more diamonds to lead, and (d) on the round of clubs East dropped the nine.

The play continued with South leading a low club to the jack, taken by West's queen, with East showing out. When West returned the three of

NORTH
♠ Q 8 5 4 3
♥ A K 5 4
♦ J 6
♣ J 6

WEST
♠ 7 6
♥ Q 10 9 3
♦ A
♣ K Q 10 4 3 2

EAST
♠ 10 9
♥ J 8
♦ K 10 9 8 5 4 3 2
♣ 9

SOUTH
♠ A K J 2
♥ 7 6 2
♦ Q 7
♣ A 8 7 5

South	West	North	East
1 spade	2 club	4 spade	pass
pass	pass		

hearts, rather than a diamond, declarer decided that all indicators were pointing in the right direction.

He took the ace of hearts, returned to the closed hand by leading a trump, and led the seven of clubs for a marked ruffing finesse. If West played low declarer could simply throw away his losing diamond, but West covered with the ten so dummy ruffed.

The problem now was to return to the closed hand to cash the good club before the defenders could take their diamond trick. Declarer therefore played the king of hearts (upon which East dropped the jack) and a low heart, hoping that West would be forced to take the trick. The odds were in his favor, because West was likely to have the queen of hearts.

West did indeed take the trick, led another heart, and declarer was home free when he was able to ruff in the closed hand.

Edge of History

(Continued from page 7)

formulaic descriptions; what is objectively outside the field of our consciousness is literally inconceivable." Science does not recognize the evidence of sleeping prophets no matter how many cures they effect; apparently the lack of explanation outweighs the evidence of results, an example of just how close-minded an institution supposedly dedicated to the pursuit of knowledge can be.

Thompson suggests an underlying motive behind the blanket rejection of Atlantis' existence: a theory of history containing an advanced civilization which was totally destroyed by natural forces has shattering implications; it destroys the technological myth of progress, of the advancement of the civilization ever upward, if sporadically and gradually upward, with only minor and occasional setbacks, from barbarism to our present elevation, and higher in the future. If a civilization existed 12 or 20 thousand years ago, and destroyed itself by unleashing forces beyond its power to control, the same thing might happen to us — say, by nuclear blasts disturbing the earth's mantle and triggering cataclysmic earthquakes.

This re-visioning of history is ultimately the most radical thought in the book. For by it we are forced to put off the *hubris* that says we can rule nature; and the way is open for a return to the affective resonance with nature we abandoned so long ago when we went to live in cities.

Books are read for style as well as content, and style, as McLuhan says of the medium, is a message. *At the Edge of History* is beautifully, dramatically written. Thompson writes with a lyrical pen that doesn't hesitate to turn a poetic metaphor. You should be able to read it in one sitting; I did. But to really get the content out — and not be merely dazzled by the prose — you ought to read it again. Hopefully it will appear in paperback soon so that it will receive the wider audience it deserves. Unfortunately, its excellence will probably prove its flaw: I suspect it is too challenging and un-reassuring for the bestseller list.

ARTS

radio:

Dialing Boston

By P.E. Schindler, Jr.

Boston is one of the top ten radio markets in America; it offers anything you can hear anywhere else, except that here it's usually done much better.

If you care anything about hi-fi, your major interest will probably be FM. The two most popular FM's in town on the commercial side of the dial are WBCN and WROR.

WBCN at 104.1 MHz is 24-hour, stereo, "progressive" rock. They play a lot of album cuts, ranging over the whole spectrum of pop music, and now and then make a stab at "public service" shows. Commercials are infrequent, youth-oriented, and soft – ones that listeners find offensive are dropped. Any talk usually has to do with the music, or area concerts, or a hitch-hike exchange the station runs, or the daily report of missing cats and dogs, and it is always whispered, never shouted.

WROR (under the same ownership as WRKO-AM) is Boston's outstanding salute to automated broadcasting. The station is part of the RKO-General group, and is currently being programmed with an automation format known as "Solid-Gold Rock and Roll," a concept hatched from the fertile mind of Bill Drake. (Drake is alse known for saying "more music" and for making a lot of money in AM rock formats.) There is no personality at all here: the music is either front or back announced. One thing is certain: you won't forget the name, since the jingle sings "solid gold rock and roll" almost as often as the announcer (on tape) says "WROR, Boston." The automation is *very* slick, and could fool almost anyone into thinking it is live. A moderate number of commercials are screamed each hour. You'll find it at 98.5 MHz, in stereo.

After the top two stations, the FM picture is less clearly defined. WJIB or WBOS (96.9 MHz and 92.9 MHz, respectively) serve up the Stereo Syrup, 24 hours a day. Syrup is soft background music and Frank Sinatra, played in groups of three and announced at the end of the trio by a deep-voiced man who sounds half asleep. But he has a very heavy commercial load.

WEEI-FM at 103.3 MHz is the CBS owned and operated FM outlet in Boston, but it doesn't sound at all like its AM sister. It's programmed with soft-sounding rock for "young adults," a type of programming not-so-fondly known as "chicken-rock." But if you don't mind a lively and often knowledgable announcer, and a program format which avoids both "hard" and "bubblegum" rock, you can set your dial here. It's stereo.

WCOP-FM, in conjunction with its AM sister (100.7 MHz and 1150 KHz), handles greater Boston's desire for country and western music. If Ferlin Huskey and Glen Campbell are your forte, then listen here but stand by for a number of commercials.

WCRB-FM (102.5 MHz with an AM at 1330 KHz) is licensed to Waltham, but makes greater Boston one of the few markets in the country with a full-time Classical outlet which is not only surviving but prospering. Great symphony concerts are scattered through the week, including the Philadelphia and Cleveland Orchestras, and of course live Boston Symphony on Saturday night. With the exception of drive time, the music-minded management maintains high quality classics programming, which avoids the trite and plays to a broad range of taste. The station is 24 hours stereo, technically excellent, and keeps commercials to a reasonable, moderate level.

Since Boston is the largest and densest college town in the country, it follows that there's a high concentration of educational radio, most of it pretty high quality, some of it not. If you want to hear future rock DJ's in training, with no commercials, try WERS at 88.9 MHz, where the "Freedom Trail" keeps rolling along. WGBH at 89.7 MHz (stereo) is run by a combine, which includes MIT, known as the Lowell Broadcasting Institute. Its programming is polished and literate. (Its transmitter is at Great Blue Hill, but its call letters are rumored to stand for God Bless Harvard, another Lowell trustee.) WBUR, at 90.9 MHz, can usually be received on most amplifiers in fraternities on Bay State Road, but you get better results and some good programming if you use a tuner. Included, of course, is the "Harvard Square" radio program, the most ambitious, original radio series produced in the last ten years.

Last but not least, there is MIT's own WTBS, broadcasting at 88.1 MHz from a tower atop the Eastgate building. Power is now up to 20.4 watts, which doesn't sound like much, but thoroughly covers the campus and fraternities. The station plays music basically, sampling such diverse forms as underground, oldie rock, jazz, blues, country, folk, and live whatever-it-is from the Student Center's Potluck Coffeehouse. In addition, WTBS has an award-winning news department which cranks out a slick half hour news program nightly at 9 pm, in addition to several specials per year.

AM radio, in passing, has only three things you don't get on FM: just plain rock, personality, and talk. Just plain rock comes 24 hours a day from WRKO, "the much more music" place that screams out at 680 KHz, while WMEX (1510 KHz) is where the "good guys" play rock and talk. There is also a marginal daytime-only station, WNTN (1550 KHz). Personality radio is the name of the game at WBZ (1030 KHz) which plays middle-of-the-road music for the old folks. Solid news blocks and call-in talk dominate WEEI (590 KHz), the CBS-owned AM outlet in Boston. The news coverage is outstanding, and the talk shows ... well, the talk shows are talk shows.

These are just a representative sample – the dial reveals numerous other stations, less well-known, but each with its own audience.

recordings:

Summer slump is here again

By Jay Pollack

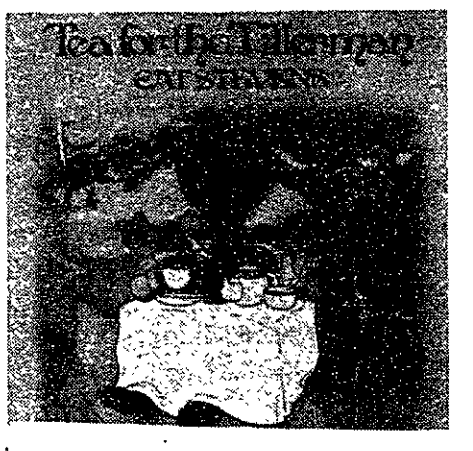
Remember last year, when talk was how there weren't many good rock records being released, how rock music was stagnating? It was hard to find ten albums worth wasting ink on.

Well, judging from releases in the first half of '71, it seems the downward trend continues with little relief in sight. The industry's output, to say the least, has been dismal.

One of this drought's most depressing aspects is the large number of performers whose 1971 releases are just not as good as their previous work. While many of the discs are tolerable (or even worth buying), artists such as the Rolling Stones, James Taylor, Jethro Tull, Dave Mason, CSN&Y, Procol Harum, Paul McCartney (and the list is a lot longer) have failed to provide us with the superior music they have given us in the past. Add to this the list of people who haven't released anything this year (Grateful Dead, Neil Young, The Beach Boys, The Who, Randy Newman, The Incredible String Band, Van Morrison, The Band, and so on) and you've got a staggering lack of memorable music for the year. Of course, many of the people on this last list have albums coming up soon, so possibly there will be a resurgence of quality as at the end of last year.

But still, it's just plain disappointing to look through the racks and see all the dozens and dozens of "just all right" albums. They aren't necessarily bad, but they're the kind of things it is hard to think of in terms of the best of the year. Only four even stand out above the rest.

The first is Cat Stevens' *Tea For The Tillerman* (A&M). He performs without any wasted notes, his arrangements very simple, yet always strong enough. The songs themselves are masterpieces, and the words get the delicate treatment they fully deserve. The melodies will stick



in your mind a lot longer than anything off James Taylor's album (which is good but hardly outstanding).

The second winner is *Tapestry* (Ode 70) by Carole King. She's been writing popular hits for a long enough time, but only recently has she taken to performing them herself. Her first solo effort, *Writer*, was commendable, but her vocals were perhaps too weak to carry her through the album. Happily, she's a lot stronger on *Tapestry* and her material is even better. The backup group is loose and light. And it's now very obvious that she sings her songs much better than anyone else.

Joni Mitchell has once again proven herself to be a consistently outstanding songwriter and singer, with *Blue* (Reprise). On this album are found some of her deepest feelings. Taking fullest advantage of the language, she lets herself pour out into her rambling tunes. The melodies are hard to sing back, but the words will make you wish you could. Joni can definitely be counted on to produce a beautiful work each year.

These three records have justifiably received widespread acclaim (not to mention great commercial success). My fourth, however, has been largely unheralded. *The Flying Burrito Brothers* (A&M) is the group's third album, and a further perfection of their sound. They had the unfortunate luck to originate (out of the *Sweetheart of the Rodeo* Byrds) at a time when the current fad was "country-rock" and every third rate band in the country was sharpening up its drawl and putting the steel strings on its guitars. The Burritos are all fine musicians (they've gotten better since then, too) and have produced two decent LP's led by Gram Parsons and Chris Hillman. They have some different people now, but the sound is still the same.

One important change was the addition of Rick Roberts on rhythm guitar to replace Gram Parsons. Roberts has a great voice and contributes (by himself and with Hillman) most of their material. Meanwhile, each of the others adds an important part to the music. Together, they create a most relaxing sound. The country flavor is just right, not too corny or saccharine, yet smooth and mellow as Sneaky Pete sculptures in the sound on the steel guitar. The whole style is a very coherent one, yet the group is not what you would call "tight." The pieces all fit together and the result is a really bright spot in an otherwise dull year.

There have been other good records, too. Jethro Tull, Graham Nash, Rod Stewart, the Rolling Stones, among others, have put out records which by most standards are somewhat impressive. But they don't stand out as much as the four big ones do. And four records in six months is a pretty terrible rate. Hopefully, the next few months will feature some of the old reliables to carry us through to 1972. Or maybe the Beatles will regroup and point the way. Or something.

film:

Blood and glory of Japan

By Emanuel Goldman

Thanks mainly to a collection of Japanese films screened at Boston's New England Life Hall, this summer has offered an unexpected bonanza for the serious filmgoer. Some of the great films in cinema literature are being screened, including Kurosawa's, as well as several by other artists not widely known.

For a series of this scope, generalization is admittedly risky; but with that forewarning, certain common characteristics may be cited. The majority are set in pre-twentieth century Japan – some go all the way back to the middle ages, some only as far as the 17th and 18th centuries. The figure of the samurai – frequently compared to the American gunfighter, dominates the action. Extending the comparison, these films as a whole bear marked resemblance to the genre of the western. In at least one instance, the basic plot outline has been used for a western: *The Magnificent Seven* comes from *Seven Samurai*. Toshiro Mifune usually plays the fastest sword in the east; in some films, only gunpowder can stop him.

The settings, mostly simple and close to the land, are visually reminiscent of Japanese silk-screens. A mood of proper decorum, of custom become ritual, suffuses each work. To be sure, a few of the films deliberately reject this atmosphere and go to the other extreme where survival is the only moral imperative – *Onibaba* and *Woman in the Dunes* (both masterpieces) come to mind. But in general, it is the extensive structure and social ordering that provide the tension and impetus to each story.

Thus, many of the Japanese films I have seen are in some measure stories of personal resistance to rigid social order. The samurai of *Chushingura* rebel against a code that condones an unjust forced suicide of their leader. In *Samurai Rebellion*, *Sancho the Bailiff* and *The Scandalous Adventures of Buraikon*, unjust rulers are challenged by citizens or samurai. In *Drifting Weeds*, a young man attempts to marry an actress against the wishes of his family. And in the Kurosawa samurai films (*Yojimbo, Sanjuro, Seven Samurai*), the non-conformist samurai (Mifune) astounds and scandalizes the proper, timid citizens that come in contact with him. These films aren't concerned with challenges to conformity *per se*; they are more interested in those moral struggles that ultimately lead to the taking of action. The questions thus become Confucian: "How far can you push a person before he begins to assert himself?" and, "What is the proper balance between the requirements of society and the rights of the individual?"

In all the films, the individual ultimately stands up for his rights, but only after being subjected to intense pressure, both from within and without, to bow to social expectations.

A final obvious characteristic of these films is the paucity of physical affection (translation: no sex). Perhaps connected to this, the films contain a vast excess of physical violence. Don't try to count the corpses – there are too many. It makes that frequently debated American obsession with violence seem rather mild by comparison.

As I suggested earlier, there are indeed exceptions. My favorite Kurosawa films – *Ikiru, the Lower Depths*, and *Rashoman* – don't fit into the above discussion. Perhaps the safest generalization I can make about the series is that it offers a unique opportunity to glimpse a different and fascinating culture, as seen through the eyes of several consummate artists.

New handbook: 'Enlighting'

"The Handbook is fantastic – not only is it clear and comprehensive, but it was really *enjoyable to read – made me laugh a lot, smile even more, and by the time I finished it I was (am) totally psyched. Good work."*

"Does MIT actually expect a person to read all the literature they send? I didn't."

"Although everything is outlined clearly, I have found it confusing only in the fact that there is a great deal more choice in all the required areas than I had anticipated."

The quotes above are all from members of the Class of '75 – next year's freshmen – and all are referring to the same thing: this year's version of the Freshman Handbook.

Unmentioned in admissions material or the Catalogue, the Handbook was the largest piece in an imposing pile of printed material mailed to each incoming student last June. Included were a variety of cut-outs to be returned, indicating such things as advisor and humanities preferences. Among them was a "Reader Summer Response Form" requesting specific suggestions for the improvement of next year's edition.

With only a month and a half to digest the contents before the nominal deadline of July 20, nearly a quarter of the freshman class has responded, and replies continue to arrive.

Opinions, not unexpectedly, have been divided: some found the Handbook too long, others thought more should be added. While the consensus was almost unanimously (often ecstatically) favorable overall, specific complaints were anything but scarce – nearly every section found some demurrers. "For the rest of the Handbook I have only thanks" was a typical closing comment. Others were impressed but remained skeptical, witness: "I can't think of anything wrong with this Handbook . . . yet."

The Freshman Handbook was born only two years ago, when the Freshman Advisory Council took responsibility for merging several previously separate publications over the summer. Since then the sections have been more closely integrated, and much has been rewritten or rearranged. The book presently contains extensive advice for choosing a freshman academic program, plus sections on sports, extra-curricular activities, Residence/Orientation Week, academic standards, registration and Independent Activities Period. Also included is advice to advisors (who also receive copies) and a directory of "Helping Resources – People to Talk With."

Response forms included with last year's book generated about 50 replies; this year a few specific yes/no questions were added, with additional space for further comments, in hope of increasing the return. The results were gratifying – the response has been five times as great already, three-quarters of it with additional written comments.

Aside from specific changes in procedure, student response is the most important factor in modifications of the Handbook from year to year. Communications from freshman advisors and other members of faculty and administration are also taken into account, of course, but few are received till the fall.

Significant objections raised by responses so far include:

Length: while nearly all of the respondents checked "about right" as their opinion of the Handbook's length, it is clear many of them wished it could have been abridged or expanded.

Those who wished the book shorter pointed out that many sections inessential for summer reading could be shortened or eliminated to make the whole work (164 oversize pages plus dividers) less imposing. At present, information of immediate importance is mixed in with long-term advice, on the whole a perhaps intimidating compilation if you're not expecting it. "The Handbook is somewhat confusing at first and required careful going over to eliminate the confusion," as one freshman put it. Others must have had no time for careful going over at all – evidenced by the numerous queries concerning topics actually covered somewhere in the book. (No doubt some never did find the Reader Summer Response Form.) There was also some feeling that certain material was needlessly repeating the Catalogue.

On the other side, there were those who thought more should be added from the Catalogue to make reference easier – descriptions of electives, for instance, or details of course requirements in upperclass years. There was sentiment that "it can't *hurt* to include as much information as possible as soon as possible" and that many specific items from How to Get Around MIT (published in September) ought to be explained in June.

Freshman academic program: the explication of first-year options generally met with approval, though advanced placement procedures were not clear to all. Freshmen most often complained they were still in the dark about what size load they should carry, or how much time they would have left for extra-curriculars – topics treated at length only in a separate section on academic performance. Some with advanced placement would have liked more discussion of the sophomore year; some conceded theirs' were special cases which couldn't be provided for in advance.

First-year subject descriptions: here adequacy appeared to vary depending on the student's concern. Many simply checked "yes"; many others found information lacking in one or another subject area. Typically, it was the distinction between the courses – either the preparation they required, their content, or their advisability in light of later plans – which was unclear. There was much sentiment for inclusion of syllabi and text lists for all courses.

"I won't know how *accurate* the descriptions are until I take the courses" was another frequent line. Student-generated evaluations were repeatedly proposed: "Perhaps if a few of the course descriptions were written by a former student (with more side comments such as "moan!" etc.) the freshman would have a better idea on which courses would be best suited for him." There was support too for sketches of instructors' "principal interests, teaching techniques, and attitudes toward their subjects." (Few were aware, apparently, of the extent to which subjects and instructors change from year to year.)

Freshmen were also keen on finding typographical errors – a few provided or promised detailed errata. Sample: "Page 7-3, 11 lines up from the bottom, column 2, 5th word: 'section' is misspelled. Otherwise a magnificent job." But students contrubuted their own array of new words in their replies ("simultaneous," "watter," "vage," "exspect"). One respondent's single-word comment was, "Enlighting."

Other comments covered just about everything else. Respondents requested clearer page-numbering, more activity descriptions, further mention of humanities in French, greater detailing of IAP, clarification of the "seminar requirement," inclusion of a map of local Boston and Cambridge, and on and on.

As for what the forms say about the makeup of the Class of '75, it appears the rest of the Institute will have to wait until September to compare reality, too. From the present vantage one can only judge literacy (so-so) and concern (the usual) and puzzle over the true significance of such statements as "I really like cutting out these forms, but I really hate writing on them."

READER SUMMER RESPONSE FORM

We will welcome your critical evaluation of this *Handbook*, together with any specific suggestions for improving the next edition which has a tentative copy deadline of March 31, 1972. This tear-out is provided to encourage you to put your thoughts in writing (they tend to survive longer that way). Mail to: Freshman Advisory Council, M.I.T., Room 7-103, 77 Massachusetts Avenue, Cambridge, Massachusetts 02139.

A1. Have you visited M.I.T. during the last 12 months? (YES) NO)

2. Have you talked with an M.I.T. undergraduate during the last 12 months? (YES) NO)

B1. What is your opinion on the length of the *Handbook*?
___ too short
✓ about right
___ too long

2. Did Section 5, First Year Program, answer your questions about the Freshman year academic program?
✓ Yes
___ No, I still have a question about Electives - How do they fit into Institute Requirements - Do you need certain amt. of Unrestricted Electives or must you choose certain electives for certain departments.

3. Did Section 6, Basic Subjects, clearly explain the specific subject options? (YES) NO)

Comments.

C. Further Comments. All in all a very beneficial and informative book considering few colleges provide information to the freshman in this way or extent so early. Except for me being a bit unclear about use of electives I thought the rest of it was clear and easy to read. As the humanities choice must be made so early I think a fully detailed Freshman humanities description should be included. Something must be substituted for invaluable "grapevine" information about courses which could be more easily obtained such as samples. Perhaps course descriptions of the last 2 grads who took each course some who liked it and some who didn't might help.

SPORTS

Poll shows MIT with most sports

By Brad Billetdeaux

An NCAA survey has revealed that the leading jock school in the country, the only one that offers 21 different undergraduate sports, is that famous old football factory, the Massachusetts Institute of Technology.

–Sports Illustrated, May 18

They weren't kidding. At MIT there are more sponsored intercollegiate varsity sports than at any other university in the country – 21 in all. Even a sports enthusiast would have trouble coming up with the names of more than half of them. Alphabetically there are baseball, basketball, crew, cross country, fencing, golf, gymnastics, hockey, indoor track, lacrosse, pistol, rifle, sailing, skiing, soccer, squash, swimming, tennis, track, water polo, and wrestling.

Actually MIT fields 23 varsity teams, as crew consists of both heavyweight and lightweight divisions, and sailing is divided by sex: men's and women's teams.

Surprised? You might be, because MIT isn't trying to build an eastern athletic powerhouse. While other collegiate sports programs are taking a second look at their philosophy and objectives, which ultimately means cutbacks and the exclusion of so-called minor sports, Tech sports continue to thrive.

A familiar adage around the Athletic Department is that if two people get together and decide they want to start a team – any kind of team – MIT will provide them with a coach, uniforms and a place to play. That's not far from the truth. Five years ago an enthusiastic group of freshmen organized themselves into a bona fide gymnastics team and proved they deserved collegiate varsity recognition. With a full-time coach and a workable schedule, MIT gymnasts have since been in the thick of New England championship competition.

More recently, water polo became Tech's 21st varsity sport. Started last fall, water polo immediately became a great spectator event especially when an MIT team squared off with our neighboring rival, Harvard.

While other colleges' athletic departments emphasize certain sports, MIT's belief, expressed by Athletic Director Ross H. "Jim" Smith, is "We try to treat everyone the same." He adds, "MIT's athletics are more closely related to the same objectives of the university in general."

For that reason he says, "Nationally, I think other college programs are coming to our level. We give everyone who comes here a chance to compete on the level he or she can handle. When a student is admitted here he is not identified as an athlete on any form. The admissions office takes the most qualified, most interesting people and there are athletes who fall into this category. The only recruiting we do is to respond to inquiries, mostly by letter. And then we don't chase anyone.

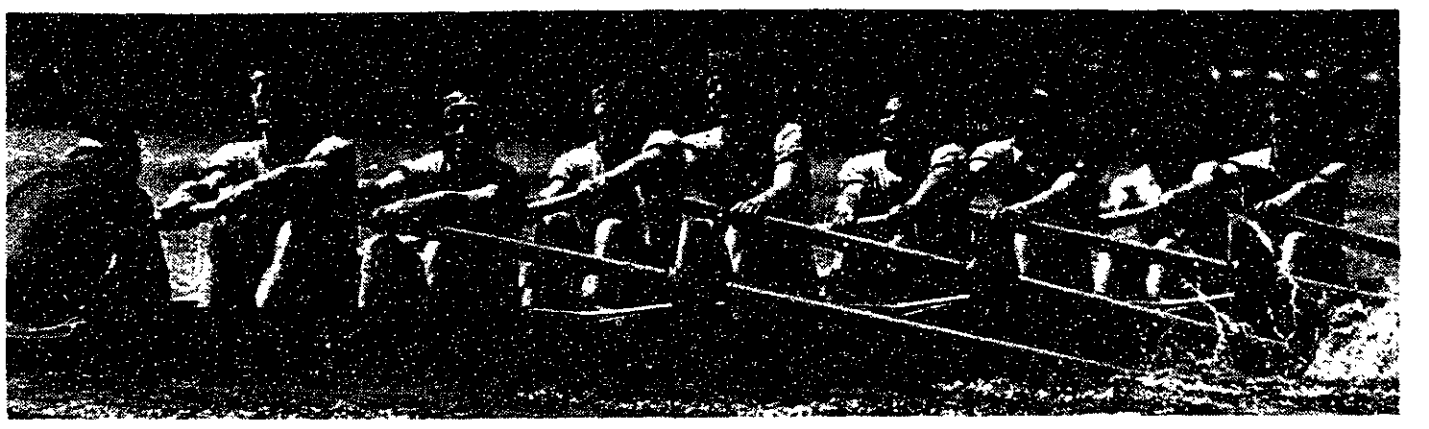
"Our twelve club sports and nineteen intramurals are just as important. If we based our program on spectator interest we wouldn't enjoy it. Of course, we'd like to have more spectators at our events.

"Coaches today give athletes a chance to participate in the planning of the program. The big difference between today and the past is that the response is no longer 'cause I told you so.' There is less regimentation, but there comes a point in the game where the game plan has been formulated and the athletes must perform as a team."

Hard-sell athletic recruiting may be unheard of at MIT, but outside recognition of accomplishment is not uncommon. In the last six years MIT basketball players Jack Mazola, Bob Hardt, Dave Jansson and Bruce Wheeler have won $1000 NCAA postgraduate scholarships for academic-athletic achievement.

When you think of MIT sports, you automatically think of crew, basketball and sailing. MIT has enjoyed success consistently through the years in those sports, but little is known of the fact that the Tech pistol team is the National Collegiate Team Champion and that junior John Good is the nation's best international target expert, that Tech's fencing team has won seven of the last ten New England fencing team titles; that MIT's track team has recently won the Eastern Small College Track and Cross Country team titles; that in recent years MIT has had All-Americans in Ben Wilson '70 (track and cross country), Savit Bhotiwihok '68 (soccer), Al Graham '71 (swimming), Fred Andree '71 (wrestling), Guy Pommares '71 (fencing), John Good '72 (pistol), Dave McComb '70 and Steve Milligan '70 (sailing).

So while other collegiate athletics may be undergoing a metamorphosis, MIT quietly continues to grow in quality as well as quantity.



Pictured above, the two fine eight-oared crews which represented the Class of '74. Top, the lightweights lost only one regular season race and finished third at the Eastern Sprint Championships. Bottom, the big frosh heavyweights, racing on the Charles, beat Columbia and Dartmouth.

Photos by Brad Billetdeaux

Architectural psychology and the new Burton

By David Searls

If nothing else, the old Burton House was sturdy.

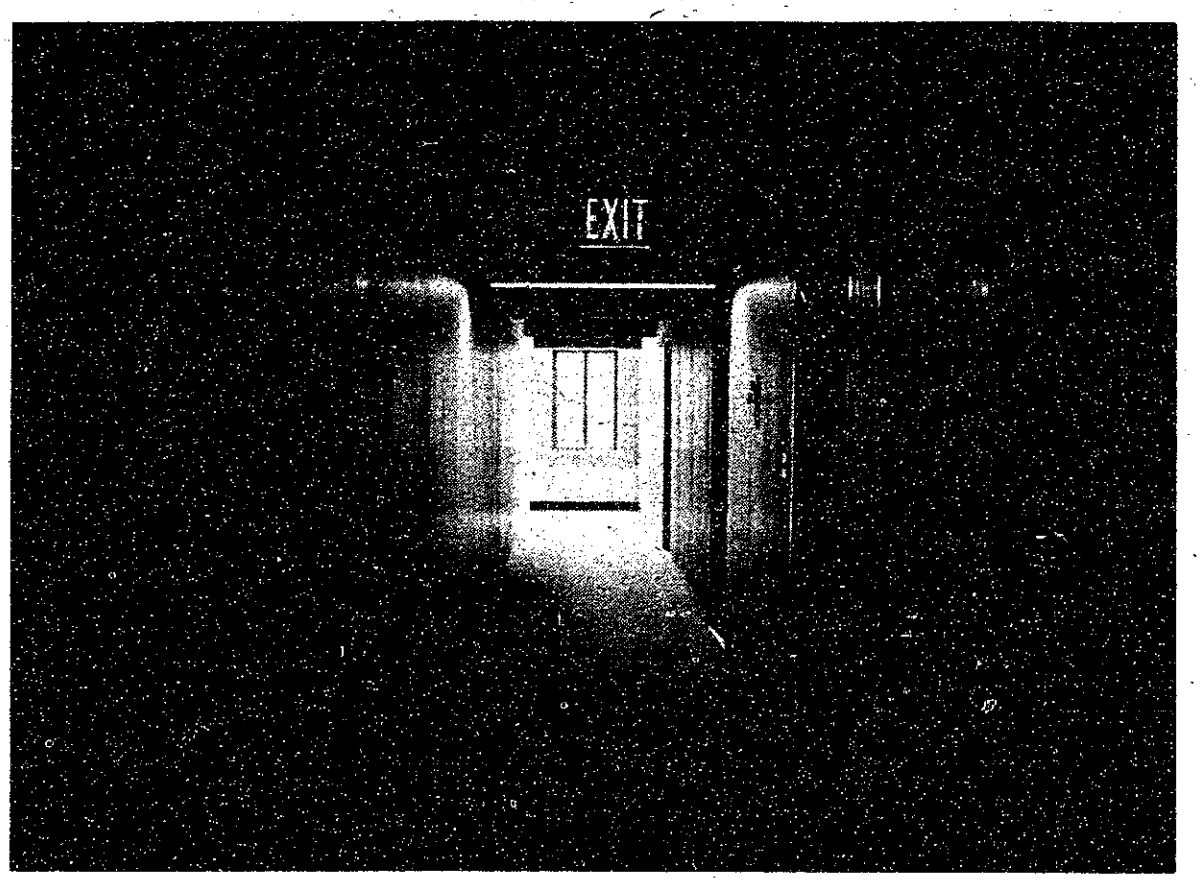
To be sure, the plaster flaked, the pipes jutted inconveniently, the carpeting (where it existed) aged ungracefully and when wet smelled dankly of old beer, the furniture stubbornly resisted anything resembling interior decoration, and the Servend machines consistently denied their services, seemingly with a frequency correlated to the degree of desperation of the vendee. No one disputed the fact that Burton was ugly, decrepit, institutional, and often depressing in its own right.

Still, there was very little you couldn't do in Burton. You could conduct massive waterfights up and down the halls and in the stairwells, with a veritable armory of marias (two to ten foot lengths of plastic lab tubing gorged with water, which imparted their elastic energy to said water in a stream of stunning force. These and myriad other offensive inventions flowered during the latter days of Burton), and JudComm would usually give you at least an hour before issuing the first warning. You could commit all manner of misslery in the halls (from tennis balls to frisbees), and break only a few light bulbs in an evening, probably without even cleaning them up. You could carefully flush literally miles of computer tape down the toilet, a few yards at a time, in an effort to reach the Charles (later to discover that most of it conglomerated at the first bend in the pipe, eventually flooding the first floor to a depth of several inches).

There was something equalizing, and democratic, in the squat, simple structure of Burton. All the floors were the same – five stories didn't give you much of a view, and most of the windows faced the opposite wall, anyway – and the rooms were consistently wretched. In other words, everyone was in the same boat. This fact was little comfort; it didn't even come to light until the eve of the move to the promised land, MacGregor House. Then, the rush was on for room at the top: the tower, which afforded lofty, picture-window views of Boston but had limited capacity. The greasy student politicians fabricated a point-system plan for the allocation of suites, by which those who had rendered service to Burton House (the greasy student politicians) would take the choice floors in the tower, along with their friends. Too late the people took up the cry (with such memorable slogans as "grease floats to the top" and "Tower to the People!"), and realized that misery made good company.

*

The security guard lets me come with him as he makes his rounds when all the workmen are gone. He walks ahead of me, speaking laconically of the progress of the construction and occasionally plugging a key into the leather-covered, canteen-like watchmen's clock that records his perambulations.



We start on the fifth floor, where I had lived before, and I am immediately struck by a kind of claustrophobic shock in the renovated hallway. The roof has been lowered, and the hall seems much narrower; I am not sure whether the dimensions have really changed, but it is probably mostly an illusion. The vertical slats of wood, soft lighting, and colorful carpeting are in sharp contrast to the gray-walled, starkly lighted hallways in the old Burton. Any minute, I expect to hear Muzak emanating from the hall speakers.

It occurs to me that the change in size is (of course) functional – in the old Burton one would spend much of one's spare time lounging in the halls, conversing, "hacking," whereas, with the new suite system, this was obviously not a part of the master plan. Before, all of the rooms on an entire floor faced a central hall, which meant that all of some 100 people were separated from each other by two, or at most three doorways and a rather simple, orthogonal hallway. Now, the floors are divided into many independent living areas, with fewer than ten people each. Each suite has its own living room to satisfy the need for social interaction – among the others in the same suite. The smaller halls are labrynthine – at times, there are three halls running parallel, one on each side of the main hallway, in order to insure that the rooms are separated even from the common hall, let alone each other. Thus, the reason for the small passageway – the hall is meant exclusively for walking through on the way to one's suite.

"They used some nice pastels on the walls, but that green . . . I don't know," says the watchmen, showing me some of the rooms. As if in reaction to the former drabness, the walls and carpets are now variegated to an extreme, including bright reds and purples. On the other hand, the room I am to occupy has gray carpeting which, as the guard points out, "looks like the underpadding."

Gigantic Frigidaire refrigerators and ranges sit waiting for installation, the result of an age-old struggle against the tyranny of the compulsory commons system. Burton's opulent dining hall, previously the most modern portion of the building, will now sit neglected. Instead, the suite will be entirely self-sufficient, in addition to being geographically isolated – a microcosm unto itself.

I don't envy the planners of modern dormitories; they must be adept – not only in architecture, but in social psychology. How many people to a suite? Is five too few? Is fifteen too many? MacGregor was organized into entries which contained a number of suites on several floors, and the concensus now is that the suites were too small and the entries too big, as evidenced by disproportionate use of the common rooms for each subdivision. It's a tricky business, but if you can hit it right eventually, it might pay off in well-adjusted students. It will certainly eliminate the haphazard nature of the old Burton, where you ranged up and down the halls as far as you felt like in choosing your friends.

They've installed garbage disposals and rubbish chutes. We won't even have to take out the garbage.

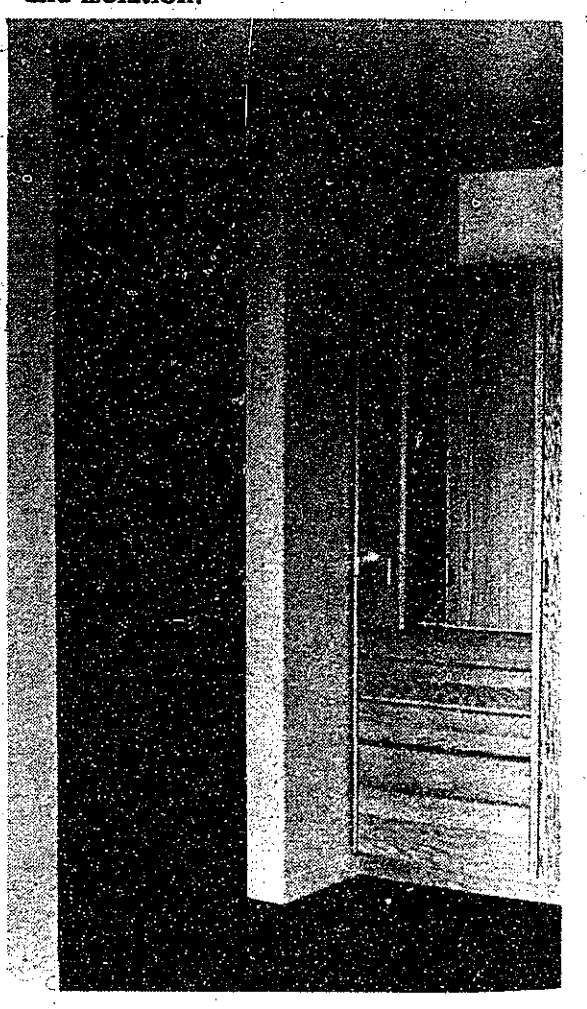
As we descend to the lower levels, the floors become increasingly dark and dirty – they have been working from the top down, and the carpeting and various other construction materials are out on the floor. The ground floor, however, is close to completion, and it is obvious that here is where the architect got his kicks. The recreational areas have an ultra-modern decor, with arched ceilings and off-beat lighting. The stairways are built like Peruvian monuments, and the library is a tour-de-force, complete with built-in modern art.

"I hear there's going to be girls right in the same building next year," says the security guard. "Pretty convenient, huh?"

I nod, and try to remember how to find my way out.

*

There were some who maintained that the reason the old Burton House was tolerated at all was synecdoche – the fact that the experience was an allegory of MIT. Not that there was anything resembling elan, or school spirit, but rather, the tie that bound was survival, and perhaps a subdued pride therein. For some, life in Burton appealed to a certain latent hippie instinct; for others, it might have been the comfort that this was as low as they would ever get. Now, perhaps, a new dimension of all that allegory has been added, that follows a pattern of institutional evolution: along with wealth and independence comes departmentalization and isolation.



Photos by Joe Kashi

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