



An Interview With President Goldberger Problems With Student Life

By Lily Wu and Ken Whang
and only.

Second of three parts.

KEN WHANG: Much student dissatisfaction seems to stem from what students see as the Caltech philosophy of education. They see Caltech as a narrow-minded institution, interested solely in developing the science side of the students and not very interested in their cultural and personal growth. What is Caltech's official philosophy concerning this?

MARVIN GOLDBERGER: Well, I haven't read recently what it says in the catalog or any similar promotional literature; the question is the extent to which life at Caltech, or opportunities are given at Caltech, for people to achieve this dual goal of professional expertise and development of personality. And it takes various forms. As you know, we do have a strong commitment and requirement that students have a significant exposure to the humanities and social sciences.

That's always been true at Caltech as far as I can tell and although we have a relatively modest and not terribly broad program in humanities and social sciences, we have a very good one that we're proud of and believe that studies in this area are an important part of a students' educational broadening.

Other aspects of the evolution of personal life that have to do with living conditions, recreational facilities—

"I would like to discourage students from trying to become graduate students while they're undergraduates."

somehow more spiritual things—are areas in which we don't do as well as I'd like to see us do.

Part of the problem as far as personal development is concerned is that you are all a highly self-selected group of people, obviously, you come here because of your interest in science and mathematics, many with tremendous dedication to those things, not perhaps had as much of an opportunity for exposure to all sorts of things that are important as you grow up and become a part of society, culturally, personally and the lot.

LILY WU: Well, we do have the humanities program available, and the requirement for it, but I don't think the typical student is given the chance to take advantage of it. You're required to take too many other technical classes, and each technical professor tends to teach his subject as your one

encourage among the students?
MG: Well, of course, academic excellence, absorbing, somehow, the flavor of a terribly exciting research-oriented institution of really quite unique character—the heavy emphasis on research, the relatively small number of students. They try to provide an example of what it means to be a scientist, what set of ethics goes with it, what kind of dedication is required.

MG: I understand what you are saying. The load that is imposed on the student by the curriculum, and the pressure, the self-pressure to become an instant graduate student when you come here, sort of adds to

"very high on my list of building priorities is a truly substantial student center"

that atmosphere.

It's a hard thing to deal with and I'll tell you, one of the most difficult aspects of it is this, the collective you are so bright that there is an enormous tendency to really teach you everything we know.

We've seen over the years, your capacity to learn and it's a hard temptation to resist. We see all this fertile soil to be ploughed, the eagerness with which the students approach the classes, most of the professors are terribly enthusiastic about what they are doing and they just pour it on.

I don't know how to come to grips with that.

LW: But that seems to create a very damaging effect. There are students every year who can handle the material but graduate or take a leave from the Institute with a very bad attitude. There is a lot of burn-out and general unhappiness caused by lack of free time and being creatively stifled in some ways. It seems prevalent enough that something should be done.

MG: Well, I think so. We have had two student-faculty conferences since I have been here and one is scheduled in February. I think this is an excellent thing to bring up, and if you bring it up there, it would be impossible for me not to have to address it.

I do believe that it's important to give students a little bit of rest, but as I say, there are two sides to it, one is the self-imposed pressure, peer pressure, and the system.

I would like to discourage students, and I have said this on various occasions, from trying to become graduate students while they're undergraduates.

LW: That still leaves us with the thought that Caltech seems only to be concerned with academic and professional training.

kw: What does Caltech try to

Security Switches To City Tickets

by Chris Meisl

Beginning March 4, campus security will be giving out city parking citations instead of the traditional "in-house" warnings. Consequently, parking violators will be fined \$15 by the city.

This change comes in response to the growing campus parking problem. Specifically, cars have been parked next to red curbs on San Pasqual and vehicles have remained overnight on the Olive Walk.

The Pasadena Fire Department has threatened to close the campus down if the parking situation is not improved. Certain free areas must be maintained for emergency

vehicles during a fire or natural disaster.

Also, many professors have complained about their parking spaces being usurped.

Throughout this month, violators are being given warnings and explanations of the new parking enforcement program. Signs will be posted at appropriate locations to notify drivers of the new regulations.

Parking violations include students parking in professorial parking spots and in reserved Athenium locations.

Further information about the new parking regulations and how they will be enforced can be obtained from the Security Office, X4701.

Wiesel To Talk at Oxy

Elie Wiesel, a teenage survivor of Hitler's death camps and a contemporary author and theological thinker, appears at Occidental on Tuesday, March 6 to discuss "When the Unthinkable Happens."

A teen-age survivor of Auschwitz and Buchenwald, the Hungarian Jew took refuge

in Paris, where he worked as a journalist and writer. Acclaimed as a voice for the human conscience, Wiesel has written novels, plays, essays, and personal testimony on suffering and survival in history and modern times.

Mr. Wiesel, Andrew Mellon Professor in the Humanities at Boston University, will connect the implications of the Nazi Holocaust to the nuclear arms. The program begins at 8:15 pm.

His lectures, it has been said, are cultural events, experiences of emotional depth, and intellectual challenges. He participated on national television this past winter in a panel follow-up of ABC's "The Day After."

Tickets to Wiesel's lecture at Occidental are \$2.50—half price—in the office of The Caltech Y. Limited transportation to and from the Oxy campus that evening will be provided by the Y, a cosponsor of the event.



Elie Wiesel

continued on page 4

Faculty-Student Conference is Tomorrow

at Ramo Auditorium. Anyone in the Caltech community is invited, but topics pertain mostly to Faculty, Grads, and Undergrads. The conference schedule is as follows:

- 8:00 am Donuts and coffee
- 8:30 am Chem 1
- 9:10 am Humanities
- 9:50 am Break
- 10:10 am Transfer options
- 10:50 am Graduate-Undergraduate Relations
- 11:30 am Break
- 11:50 am Summer Undergraduate Research Fellowships
- 12:30 am Report On Educational Computing
- 12:40 am Summary
- 12:50 am Lunch

Notes

Please come even if you haven't signed up and even if you can only attend part of the conference. You can pick up conference notebooks before Saturday in the Dean's office. The Y, and the Red Door Cafe or on Saturday at the conference.

St. Patrick's Party

The Master's Office will be having a St. Patrick's Day party on Friday, March 9th. It will be in the afternoon on the Olive Walk.

Appointed Offices

Nominations for ASCIT appointed offices opened last Monday and will close this coming Monday evening. The sign-ups are on the door to the Master's Office. This is an excellent opportunity to get involved in ASCIT. For more information see the little t.

letter

"Brotherly Love" Is a Success

Attitude Adjustment Needed

To the Editors:

Early in my life I was informed that there are basically three types of people—those who don't see things as they are, those who see things as they are but don't do anything about them, and those who see things as they are and do something about them.

What Caltech needs is an "attitude adjustment hour." I sure have fond memories of the ones we had back home.

Respectfully yours,

—Kelly D. Cherrey

by John Galt

"Brotherly Love" is a romantic comedy by Mark Masouka that is billed as a love triangle with four sides. At the center of the triangle is Paul, a homosexual businessman, who is trying to be independent in a world ruled by his own friends.

He has an insensitive and domineering sister, who raised him as a child and now cannot accept him as an adult. He is engaged to a woman who is racing against her "biological clock" to have a family before it's too late, regardless of her husband's desires.

Paul also has a lover who wants to have a mature and open love relationship in a society set against homosexuality. Paul seems to have the least to say about his life,



merely trying to meet the expectations of his three closest friends.

As the play unfolds, Paul, encouraged by his lover to be

independent, breaks off his engagement with his fiancé and informs his sister that he wants to sell the business to become a photographer. As the two

women react, Paul, not certain of himself, begins to falter.

The tension is further increased as his homosexuality is revealed to both his sister and fiancé. The action continues into the second act until a solution, that seems to leave everyone satisfied, is finally achieved.

"Brotherly Love" is a well-written play, with lively and witty dialogue as the characters are played with each other. Although the play has a slow start, the plot steadily builds into a plausible, albeit predictable, outcome.

The situations and the characters are very real, their concerns and fears honest and appropriate. Their conflicts and passions grow in intensity, giving us an insightful look at values in our own relationships.

But "Brotherly Love" is not a heavy, serious drama. Indeed, it is a very successful attempt at a light-hearted portrayal of a young man struggling to live his own life against the wishes and intentions of others. It is an enjoyable experience and entertainment.

"Brotherly Love" will continue at the Liberty Theatre at 2035 North Highland (American Legion Building), Hollywood, Wednesdays through Saturdays at 8 pm until March 10. Tickets are available for \$8.50 (851-2206).

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THE CALIFORNIA TECH

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Inside Information

Find That Paper

What's your score on finding a reference that is a paper from a conference or symposium or congress or meeting? How about very low! Best thing is to ask your local librarian for help. Suppose it is a week-end with no one to ask. Want a few guide lines to go it alone?

First try the card catalog (second floor of Millikan). If the name of your reference begins Conference then it's a snap. Look for Conference in the catalog. Skip all the little words like of, for, or on and go to the next significant word. Behind the alphabetical dividers you may find the conference you are looking for. The other main headings are Symposia/Symposium, International, National and then look for the next main word. If you know the editor that is even better—and might be simpler.

How about when you aren't

sure of the correct title but you know when it was held and where? Try Directory of Published Proceedings. There you will find meetings listed by place and date. This one will tell you how it was published—book, journal, or report and when. In the same section (North end under the windows, also second floor Millikan) you will also find Proceedings in Print, listed by subject

Conference papers may only be available as individual papers such as ASME, SAE, AIAA, etc. If you can't locate your paper or conference or it isn't on campus, your next step is the reference librarian who might be able to locate or obtain it for you.

Last words of caution! Proceedings are almost never listed under Proceedings, and publication can take one to five years.

—Jean Anderson

The Caltech Y Fly-by

Friday...February 17

Noon Concert—Ron George and his completely freaky bang-bang apparatus.

Saturday...February 25

Faculty-Student Conference—Ramo Auditorium, 8:30 am to 12:30 pm. Interested? Undergrads: sign up in the student houses. Faculty, grads: contact the Dean's office.

Monday...February 27

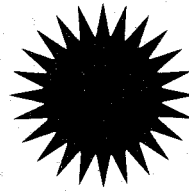
Whale Watching—sign up in the Y office for Saturday, March 3rd trip.

Wednesday...February 29

Noon Update—"New Developments in NMR in Chemistry, Biology, and Medicine," John D. Roberts. Winnett Clubroom no. 1. Bring a lunch.

Signups Friday and Monday in the Y for tickets to the L.A. Actors Theatre. \$4.00/ticket. *Sus*— a modern English mystery. 8:30 pm, 2/29.

For more information, call the Y at 356-6163.

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CAMPUS INTERVIEWS— March 5, 1984
(See your College Placement Office)

If this interview date is inconvenient, please write to Mr. N.T. Marcin at the United Technologies Research Center, Silver Lane, East Hartford, CT 06108.

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The Inside World

Blacker: The fearsome and terrible 117-eyed monster that dwells in Yucca Valley did not devour every living Mole that dared to sandpaper his hands on the very rock of the maw of his domain. All that returned were not sad to partake digestive-wise of else than Dinty Moore and others of similar ilk. (???—say what, Rod???)

In other news, los Darbos did not see fit to mincemeat-ize those hoop-hopping hopefuls, the ex-replace-men, and Blacker's discob score did not increase by any amount which was not three points.

Still, those self-same Darbie Dolls were not impressed by those dish-doting dumbbells, the Blackber waiting staff. The counterpart to this impression was not speculated upon.

Finally, do not stay me from saying that no bimbo fully possessed of his grey matter could possibly not attend the I-publicans party not on any non-this-Saturday.

P.S. WE STILL WANT BLOOM COUNTY! WE STILL WANT BLOOM COUNTY! WE STILL WANT BLOOM COUNTY! WE STILL WANT BLOOM COUNTY!

Dabney: Monday was Wine and Cheese and, despite all attempts, the faculty didn't get blitzed. A waiter exchange proved to our advantage, thanks Moles. The space cases thrashed the Flemis in GSC basketball, tough luck Ed. Some people may be going on a picnic, if enough are interested. El Dorado works. Drop Day is coming, sooner than you think!

—A porcupine who's name is knowledge

P.S. Joe says waterbeds are GOOD!

Fleming: It's been a beautiful week at the Fleming Beach, thanks in large part to Lola. Scott Stephens is the new UCC4 and the Alley 3 Beer Fridge is in full swing thanks to Bill and Greg.

To the slimeball who wrote the letter to the Tech last week: we do not have female waiters. Then again, it's just like the jock houses to prove bozos like you wrong.

—Al Fansome

Page: And so it was: 15 smiling faces arrived at Zuma Beach. The weather and the waves grew better as time progressed. The J. Paul Getty Museum was just simply awesome.

The tug-of-war match between Ethnic Alley and Alley-gory for the coveted bowling pin has not been held, yet. Tomorrow, we will be having many fun-filled hours of movie watching (Yes, Mike, paternalistic movies).

The Sophomores have still not accepted the football challenge.

Ruddock: The pigs were squealing all over the Ice House last Saturday night as the Rudds spent an enjoyable evening at the nightclub. Biff got up on stage and did a routine, and they even let Skip Stephenson on stage with him!

The three day weekend was much appreciated by everyone in the house, but getting up for classes on Tuesday was pretty bummin'.

This weekend the big event is the Frosh Party. With Vanya & Rosie doing the music, it should be very ... interesting. May Mr. Cow bless our efforts.

—Chris Mihos

Student Problems:

"I knew this one guy who would do his homework with a clock alongside of him and then tell me that he completed his physics problems in 47 minutes or something like that."

from page 1

In talking about that, there is a capital fund drive being planned and we have made a decision that by and large, we're not going to emphasize bricks and mortar. But if an appropriate donor were to come up, very high on my list of building priorities is a truly substantial student center with all of these things that we would like to see.

Our athletic facilities are also not at all what they ought to be. We've made a great start on a new swimming pool and weight room. We have a place for a new gymnasium; all we need is a few bucks to build it. We need it for the students and we need it for the faculty.

If we had the resources, and this is something you could guide me on, we have had at various times, musicians in residence. Maybe we ought to have a resident string quartet. Let me ask you, do we do enough of that? Suppose you had a serious music interest, is it available?

kw: There are lots of concerts available and stuff like that if you have the time and you really want to go out for it.

LW: But even if they're

"It's a hard thing for me to come in and state baldly, 'I think you should require less from the students.'"

continued on page 5



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Goldberger Probes The Various Causes

from page 4

available, the typical student, who spends more than nine hours on a nine unit class, often can't spare just an hour and a half to go to a concert.

MG: I used to be depressed with this assigning of the number of hours you're supposed to take with the homework. People

"I know less about rotation than I ought to but I have serious reservations about any system of that variety."

have different styles, and I knew this one guy when I was an undergraduate who used to drive me absolutely nuts. He would do his homework with a clock alongside of him and then he would tell me that he completed his physics problems in 47 minutes or something like that, and he got good grades.

But my style was entirely different, and I got good grades too, but it took me much longer. And everyone has different ways of working. I realize there are some people who just seem to breeze through.

LW: I think they are in the definite minority and a school shouldn't gear its academic policies on a small genius minority. The vacations are too short and holidays too few. Maybe the Institute should require less for graduation or restructure the trimester system.

MG: It's a hard thing for me to stick my nose in, to come in and just start flailing around, and state baldly, "I think you should require less from the students."

It's something that has to be approached in a systematic and careful and thoughtful way, in consultation with professors, and deans, and vice presidents. And I think it is a very important topic to bring up at this student faculty conference.

The point has never been really well articulated. It comes up now and again, but somehow it seems difficult to attract the attention of the faculty, to really make them or let them come to grips with it.

You know there are only a limited number of things that one can do structurally with regard to providing opportunities for recreation and as you correctly say, it's no good having a plateful, if you've got a bellyache. You've just got other things to do that you can't take advantage of all

these fine opportunities even if they were realistically there.

KW: What do you think about student life issues that have been brought up recently, such as the housing system, rotation, and the honor system?

MG: I know less about rotation than I ought to but I have serious reservations about any system of that variety.

The rotation system seems to put great pressures on students too soon. There ought to be an opportunity for them to get their feet on the ground before they have to make a decision about where they live. They don't know very much when they have to choose.

And each of the residence halls, I know, has a distinctive character and it may not be yours, and you may not be lucky enough to find the one that is compatible with yours. Again, I hesitate to come in off the wall and recommend a profound change in what is a historic Caltech tradition.

LW: In hearing what the Master or Deans have to say, their attitude is that that is a student life problem and a change must come from the student, essentially foregoing any responsibility they may have. But as I see it, students either don't have the time to make a massive change or they feel no incentive to since they will graduate soon themselves so why spend energy on something that won't even affect them, or they can't benefit from. So maybe the institute should meet the problem half

"I hesitate to come in off the wall and recommend a profound change in what is a historic Caltech tradition."

way and do more than just say it's a student problem. The change should come from the students but the institute can encourage or guide or be more vocal. Just leaving it to the IHC or whomever is useless.

MG: I'll see what I can do. I'll raise the issue. Again, raise this at the student faculty conference. I'm not trying to say that this conference is the panacea for everything but when you want to effect change, just like in teaching, you have to say things over and over again.

The key to good pedagogy is repetition. You always like to believe that you say things with such startling clarity, that people ought to understand things first time around. But

"The key to good pedagogy is repetition. You always like to believe that you say things with such startling clarity that people ought to understand things first time around. But things don't happen that way."

I've learned over many years of experience that things don't happen that way. Even the brightest student has to have it said a few times in slightly different ways. But this is something I hope to address.

LW: You mentioned earlier that you were going to say something later about the women's issue, that you'd get back to later...

MG: Oh yes. Women as role models is extremely important. I think that is especially important for the freshmen and sophomores.

There was a period of time last year, I don't know if it's a problem this year, that for

"We don't have enough women on the faculty. We work on this problem very hard"

some reason I didn't understand fully, what appeared to be an anomalously large number of women were having trouble with Physics 1 and Physics 2.

I believe that if we had one or two women instructors in those courses, it would help a

great deal. We don't have enough women on the faculty. We work on this problem very hard, I can assure you and the number of women faculty is increasing, but it's a slow process.

LW: Well, from my own experience, I know of a few professors who have said that they think women are mentally inferior and need more help than the male students. That is unfair and damaging to our self confidence.

MG: I know, that's terrible. They better not let my wife hear them say it.

Next week: Teaching quality at Caltech.

PARTY

Saturday, Feb 25th
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Personal interviews will be held in San Francisco in late March and Los Angeles in early April. Selected applicants will be expected in Tokyo from June to October, 1984.

A Generation Ago —

by Smutty

Twenty undergraduates at Tuft's university fell prey to "vomiting, fever, and diarrhea," reports the *Tuft's weekly*. Now, if that happened here at Tech, we'd know what caused it right away. But Tuft's isn't so bright; it took them a while to figure out that it was the food. The most likely cause of the disease, according to Frobisher's microbiology text (they did the research, not us), is "soiled hands ... (or) food which has become infected and is allowed to stand in a warm place after little or no cooking..." The Director of the Health Service "emphasized that most of the cases are mild, that many of the students have fully recovered, and that there is no cause for alarm." Meals, presumably, will go on as usual, i.e., amidst the screams of the dying.

Candy, little girl?

Also in the *Tuft's Weekly*, we find report that doctors at Brown University have taken to giving out birth control pills to some unmarried women. Director of the Health Service, Dr. Pembroke, dished out these adult candies to only very few girls all of whom were over 21. A second doctor only prescribed them for girls who were engaged or had been dating one person seriously for an extended period of time. We can only stand appalled at this scene of moral decay in a Great

From the November 11, 1965 issue of the *Tech*

FROM OTHER CAMPUSES

American University. In the good old days, when we were frosh, no self-respecting decent wholesome American girl would dare ask her doctor for such a pill — she'd sneak down to the drug store and buy them at the back door.

Did he succeed?

Did you know that Clark Kerr, President of the University of California at Berkeley, once said that the job of a university president was to provide football games for the alumni, sex for the undergraduates, and parking space for the faculty? Well, we have a football team and lots of parking lots. How about it, Dr. DuBridge?

Esquire Magazine, we note in the snobbery-ridden pages of Georgia Tech's *Technique*, is running a contest to find the best-dressed man on campus. The lucky winner of this competition gets a week-long trip to New York, all kinds of free clothes, and fame and laudation sufficient to make a Greek hero jealous. Furthermore, notes the *Technique* (bragging disgracefully) "Contests are also being conducted at Duke, Dartmouth, MIT, Ohio State, Marquette, SMU, Arizona State, Colorado, Stanford,

Washington, and NYU." In case you frosh can't figure out why we're not on the list it's because you could win that contest on *this* campus by remembering to zip up your fly every day.

Also in Georgia Tech's *Technique*, we find a letter from "Rosemary," a winsome coed who has fallen in love with a World Student Foundation exchange student. Remarking on the suave and sophisticated manners of this grubby foreigner, she expressed fear that "Europeans are used to all that free love... (and)... I may have hurt his feelings (by resisting all that free love)." Voicing the qualms of every true American girl, Rosemary wants to know "Was I correct in living up to my American moral standards?" The *Technique* answered with this sage note: "Give to WSF! We wish to mention that our mother always said that charity began at home."

The *Purdue Exponent* carries the story of unshamed blue-nosing at LSU's Baton Rouge campus. Hiding behind the matronly skirts of a vaguely-stated rule prohibiting "nude or obscene pictures,"

dorm authorities have begun to confiscate *Playboys* from the inhabitants. Coughing heartily as he circumlocuted, Chancellor Cecil G. Taylor said that "the University has no intention of censoring or attempting to tell students what they can or cannot read." It appears, he observed, "that this *Playboy* matter apparently resulted from an overzealous interpretation of a regulation which certainly needs further study and classification." Sounds like Eisenhower. Remarkably, one student said, "I think it (the regulation) is a good thing. My opinion is that the whole philosophy of *Playboy* is dangerous in that it undermines our society's basic unit, namely the family, with fantasies of free sex and love."

Plainclothesmen?

Always alert to infractions on Constitutional Rights, etc., the Notre Dame *Scholastic* carries an expose of the police-state tactics of the campus fuzz in their never-ending battle to stamp out touch football on the lawns. "The technique is fiendishly clever. If a gentlemen should interrupt your friendly (and traditional) football game on the quad with an equally friendly (and traditional) 'let me throw you one, fellas,' don't! Are his pants pleated and wide-cuffed, are they baggy? Does his shirt have flaps on the pockets? The coat double-breasted? Stop! This is a campus cop, who lusts for white tennies, unpleated pants, flapless pockets, and your football." Don't laugh. Would you recognize Fig Newton is a

Tech sweatshirt and bermudas? With shades?

Iowa State has taken to making things hard on young lovers. School officials slapped up no-parking signs along one side of the street in front of the women's dorms and restricted the other side to faculty members. Aside from paying for the invariable tickets, the only way out seems to be double-dating with faculty members. And who wants to do that?

The Colorado *Daily* carried news of Colorado State's planned "Bitch-In." The Bitch-In was planned to allow students to air their gripes against the University. The affair was held in an auditorium, and as each student entered, he was given an IBM card which he was encouraged to bend, fold, tear, staple, or mutilate. Each card was numbered and speaking was done in numerical order. Each bitchee was given five minutes of time and was restrained only by the rules of good taste. Some 2800 students came forward for this venting of spleens. Maybe we oughta try that, but we couldn't go because the snakes would cut our throats while we were there.

The MIT *Tech* carries a mug shot this week, of a younger and less dangerous Feynman. A frosh Feynman, to be exact, and the occasion is RF's Nobel Prize. Prof. Feynman, it turns out, graduated from MIT in '39, and thought it was the best school in the country at the time. The *Tech* also carries the news that Volume II of Feynman is being used for the sophomore course at MIT this year. Feynman, when told of this, said "Poor fellows, hope they come out all right." Fat chance. We always suspected he was a secret agent of that other place...

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sports

Basketball Victory

Beavers Beat PCBBC

by Ath Man at Large

The Caltech basketball team split two games last weekend, defeating Pacific Coast Baptist Bible College, 71-59, and falling to LIFE College 82-80.

The Beavers got off to a horrible start against PCBBC, trailing 35-26 at halftime and 47-33 with about 10 minutes to go. From that point on, however, Caltech put on one of the year's most impressive rushes, outscoring the Eagles 38-12 for the rest of the game to win going away. Stewart Peebles led the spurt as he began to dominate inside, clearing the defensive boards and outletting to Ed Zanelli for spectacular fast break baskets. Peebles, who finished with 18 points and 11 rebounds, also netted some key baskets during the surge as well as combining with Tom Heer for some clutch free throws down the stretch. Zanelli finished with 21 points, making nine of 10 field goals, and Jim Helgren added 10 points. John Krehbiel (eight points) and Chris Kyriakakis

(six) also were instrumental in the victory. The Beavers' second half defensive pressure, led by Tom Heer (five steals), was another key to the win, as the Eagles were forced into 22 turnovers.

The loss to LIFE was a heartbreaker for Caltech. The Beavers led by one at halftime, 46-45, but LIFE had already established their ability to hit the unmolested jumpers Caltech allowed them to have. The Beavers clamped down on the outside shooting a little in the second half, but LIFE turned to the inside, utilizing its superior quickness to get easy baskets. The Beavers led 80-78 with about 20 seconds to play, but a LIFE player scored to tie the game and was fouled. LIFE rebounded his missed free throw and scored at the buzzer to win. Stewart Peebles led Caltech with 25 points and 10 rebounds, but he fouled out with about five minutes left. Zanelli scored 21 again, and Jim Helgren added 12.

Beaver Baseball Beats Deacons

by Doug Oute

Caltech finally became untracked, and posted its first victory of the season last Tuesday. The Beaver's first victims were the Pacific Christian Deacons, who were defeated 9-7.

The Beavers came out firing. In the bottom of the first, Steve Havstad led off with a walk. Ed Casey doubled, and Pat Harrison singled to right field to drive them both in. The Beavers scored two more runs in the inning, thanks to a double by Kurt Schwartz and a little help from the Deacons rightfielder.

The Beavers didn't score any runs in the next two innings, while the Deacons managed to collect two. In the top of the fourth, the Deacons attempted to make a game out of it, by scoring four runs and taking a 6-4 lead. This awakened the slumbering Caltech offense. In the bottom of the fourth, Steve Havstad lined a shot into the left-center

power alley, and motored around the bases for a two-run homer. After two more men had been walked by the Deacons, Bob Mostert stepped up and hit one into the Grand Canyon (They're probably still chasing it). The game was never in question after that point. The Deacons scored only one more run, and Caltech won 9-7. Phil Scott was the winning pitcher for the Beavers, with Jim Hamrick coming on to get the save.

In Saturday's doubleheader, Caltech visited beautiful La Jolla, and see some of the UCSD campus. The weather was beautiful. Also, Caltech played two games, losing 13-1 and 17-0. The highlight of the afternoon was Coach Scott Laurence's inspirational pep talk after the mauling, which had to be heard to be believed.

Caltech's first league game will be at Redlands this Saturday. All fans are welcome and appreciated.

Weekly Sports Calendar

Fri.	2-24	1:00 pm	Golf	Claremont-Mudd	El Prado
Fri.	2-24	All Day	Fencing	Women's Regionals	Air Force Acad
Fri.	2-24	1:30 pm	Swimming (M/W)	SCIAC Championships	Southgate
Fri.	2-24		Wrestling	NCAA Div. 3 Nationals	
Sat.	2-25	10:30 am	Swimming (M/W)	SCIAC Championships	Southgate
Sat.	2-25	12 noon	Baseball	Redlands	Redlands (2)
Sat.	2-25	1:30 pm	Women's Tennis	Redlands	Redlands
Sat.	2-25	2:00 pm	Men's Tennis	Claremont-Mudd	Clare-Mudd
Sat.	2-25	6:00 pm	Basketball (JV)	La Verne	La Verne
Sat.	2-25	8:00 pm	Basketball (Varsity)	La Verne	La Verne
Sat.	2-25	All Day	Fencing	Women's Regionals	Air Force Acad
Sat.	2-25		Wrestling	NCAA Div. 3 Nationals	
Sun.	2-26	3:00 pm	Women's Soccer	Suffer-Jets	Caltech
Mon.	2-27	1:00 pm	Golf	Whittier	CIT-Annandale
Tue.	2-28	3:00 pm	Baseball	Redlands	Caltech
Tue.	2-28	3:00 pm	Men's Tennis	Pomona-Pitzer	Caltech
Wed.	2-29	3:00 pm	Women's Tennis	Clare-Mudd-Scripps	Caltech
Thu.	3-1	TBA	Swimming	NAIA Championships	Arkadelphia,
Fri.	3-2	TBA	Swimming	NAIA Championships	Arkansas

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announcements

Nominate Your Leader

The Robert L. Noland Leadership Scholarships were established by the Board of Directors of Ametek to honor its current president, Mr. Robert L. Noland, who is an alumnus of Caltech. These awards to be made by the President of Caltech, have been established to recognize outstanding leadership by Caltech students.

The Directors of Ametek recognize that leadership takes many forms and can be exercised through both traditional organizational groups as well as through informal and ad hoc activities.

The leadership to be recognized may be measured by personal actions which have helped other people and have inspired others to fulfill their capabilities. Candidates will be considered without regard to sex, nationality, color, creed, or religion. Selection will not be based on financial need or scholastic achievement.

This year Caltech is pleased to announce that awards of \$1,500 may be made to current sophomores, juniors, or seniors who have demonstrated outstanding leadership.

If you know a student who should be considered for these awards or would like to be considered yourself, please contact the Dean's Office, 102 Parsons-Gates, by March 2nd.

First Aid Course

A multimedia first aid course and a cardiopulmonary resuscitation (CPR) course will be conducted under the auspices of the American Red Cross for all Caltech personnel starting in March. The four-hour sessions are scheduled on consecutive Wednesday afternoons. The first two, on First Aid, are March 7 and 14, 1 to 5 pm. The next two, on CPR, will be March 21 and 28, 1 to 5 pm. An American Red Cross instructor will teach both courses. An American Red Cross certification will be awarded upon completion of both courses. For registration or further information call the Safety Office, x6727.

Summer Recruiting

Additions to the Summer Recruiting Schedule:

February 27, The Palantir Corporation; Santa Clara, CA; Jr. Sr./AMa APh CS EE

March 1, GigaBit Logic; Newbury Park, CA; Sr/EE CS APh

March 7, Tektronix, Inc.; Beaverton, OR; Jr. Sr./EE CS APh

March 9, Ametek, Inc.; Pasadena, CA; Jr. Sr./AMa AM CS EE ME

For Women Only

The newly-formed Undergraduate Women's Group is having its next meeting in the Y Lounge, Sat. at 2:00 pm. Bring a friend, a book, munchies, homework or just yourself and come spend some time with women only. Any questions? Find Felice at Dabney House (578-9617). Late comers welcome, too.

Soprano Debut

Soprano Kaaren Erickson will appear in Ramo Auditorium, Friday, March 2 at 8 pm. This will be Erickson's Caltech debut.

Included on the program will be works by Mozart, Debussy, Brahms, Diemer and Wolf. Erickson will be accompanied by pianist Armen Guzelimian.

A native of Seattle, Erickson studied under the baritone Martial Singher and made her professional operatic debut in 1982. Later that year, she won first prize in the Munich International Competition as well as awards from the Metropolitan Opera and the San Francisco Opera.

This concert is sponsored, in part, by a grant from the National Endowment for the Arts.

Caltech students may purchase tickets to this event for \$5.50-5.00-4.50 with a Caltech student I.D. Rush tickets may be purchased by Caltech students for \$4.00 each beginning one hour prior to performance time (subject to availability).

Tickets for Caltech faculty and staff are priced at \$10.00-9.00-8.00. They are available at the Caltech Ticket Office, just north of the Beckman Auditorium parking lot.

French One-Acts

A collection of French one-act plays by Marivaux and others will be presented by the Caltech Theatre Arts program and the Caltech Players.

Although Marivaux, an approximate contemporary of Molière, is well known in France, his work is little played in the U.S., and in fact much of it remains untranslated. The current translations were made by the directors, Ray Lischner and Stacy Stein, and the plays will be performed in both French and English.

Marivaux likes to examine the feelings of people placed in situations which reveal the nature of humanity. The result is a blend of modern introspectiveness and 18th century elegance. In *The Dispute*, the question of whether man or woman was first to be unfaithful in love is experimentally resolved when six young people, having been raised in isolation until the age of eighteen, are introduced to one another. The youthful exuberance of the lovers lends the play great charm.

The Colony deals with the eternally recurring question of the rights of women. A small group of people is marooned on a desert island where they attempt to construct a new society along rational lines. Both of these plays remain remarkably fresh for today's audience and deserve to be rescued from obscurity.

Performances will be held in Dabney Lounge, on February 24 and 25 at 8 pm, February 26 at 3:30 pm, March 2 and 3 at 8 pm, and March 4 at 3:30 pm and 8 pm. Tickets are priced at \$5, \$3 for students. For more information, call x4652.

Cleo Laine and John Dankworth

Cleo Laine will be joined by John Dankworth and the Dankworth Quartet in concert, Thursday, March 1 at 8 pm in Beckman Auditorium.

Their program will include selected pieces of their repertoire from Laine's scat impressions to arrangements of Dankworth's film scores. Featured will be Laine's four-octave range and particular vocal style.

Tickets for Caltech students with a Caltech student I.D. are available for this concert at \$8.00-7.25-6.50. Rush tickets at \$4 each may be purchased by Caltech students beginning one hour prior to performance time (subject to availability).

Ticket prices for Caltech faculty and staff are \$15.00-13.50-12.00. Tickets may be purchased at the Caltech Ticket Office, just north of the Beckman Auditorium parking lot. Call X4652 for information.

Totem Poll

Have you contributed to the Totem yet? Contributions of poetry, prose, drawings, and photographs are being accepted from all members of the Caltech community for this year's Totem.

Works may be sent to David Sahnaw, 1-55.

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If you haven't thought of a good answer, come by the Y office this Tuesday evening and find out how your (and we) can do all these things.

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6:30 pm in the Y lounge, Tuesday, February 28.

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Senior Photos

The *Big T* is now accepting senior photos for the 1983-4 yearbook. The photos submitted should be between 3"ff5" and 8"ff11" in glossy black and white. Note that the size of the picture turned in will probably not have a bearing on the size of the picture in the yearbook. All pictures should be turned into 107 Winnett along with a piece of paper containing the name, hometown and major of the senior. The deadline for senior pictures is the beginning of 3rd term.

For additional information call Roger Fong (x3961) or leave a note at the above address.

Soviet Leadership

Caltech World Affairs Forum Monday, Feb. 27, 7:30 pm in the Y Lounge. Topic for discussion will be "Change in Soviet Leadership." Refreshments will be served. Business meeting at 7:00 pm.

Tennis, Anyone?

Students interested in participating in the Scott or Novice tennis tournament should sign up at the gym front office by Friday, March 2nd.

Free Tickets to Coleman Concert

The Takacs String Quartet will perform in Beckman Auditorium, Sunday, March 4 at 3:30 pm. This is one in the series of Coleman Chamber Music Concerts.

This internationally renowned group will perform Haydn's Quartet in G Minor, Op. 76, No. 1; Bartok's Quartet No. 3; Webern's Six Bagatelles, Op. 9; and Beethoven's Quartet in E Minor, Op. 59, No. 2.

The Takacs String Quartet has recorded all of the Schumann and Schubert quartets for Hungaroton Records and are scheduled to record the Bartok quartets in the near future.

Fifty free tickets and fifty tickets at \$4 each will be available to Caltech students beginning Tuesday, Feb. 28, at 10 am at the Caltech Ticket Office (limit one free ticket and one ticket at \$4 per student).

Tickets are regularly priced at \$13.00-11.50-10.00-8.00. The Caltech Ticket Office is located just north of the Beckman Auditorium parking lot. For information, call X4652.

Beyond Words

Using only sound, music, costumes and props, the mime troupe Theatre Beyond Words will appear in Ramo Auditorium, Saturday, March 3. Two different shows will be presented: "Potato People" at 3 pm and "Five Good Reasons to Laugh" at 8 pm.

"Potato People" is a mask-mime play. Performers wear large, white, dome-like masks, which give the impression of having been carved out of a potato. This sketch involves the adventures between the Potato and Pearblossom families.

"Five Good Reasons to Laugh" is a set of vignettes, including the tale of a pear who discovers himself hanging on a branch and subsequently suffers an attack of vertigo.

A five-member Canadian troupe, Theatre Beyond Words has been touring for seven years internationally, including Japan, France, Australia and New Zealand. They are the resident company at Brock University in St. Catharines, Ontario.

Caltech student tickets are priced at \$5.50-5.00-4.50; \$4.00 rush tickets will go on sale beginning one hour prior to performance time (subject to availability).

Caltech faculty and staff tickets are priced at \$10.00-9.00-8.00. They are available at the Caltech Ticket Office, just north of the Beckman Auditorium parking lot. For information, call X4652.

Shabbat

The week is over. Come to Friday night Shabbat services tonight 5:30-6 pm in the Y Lounge, upstairs in Winnett Center. Sponsored by Hillel and the Caltech Jewish Community.

Tech Staff Meets Mondays

at 12:15 pm in 127 Baxter All are Welcome.

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