

# THE CALIFORNIA TECH

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## Wells Plans Bylaws Changes, Election Reform

by Tom McCabe

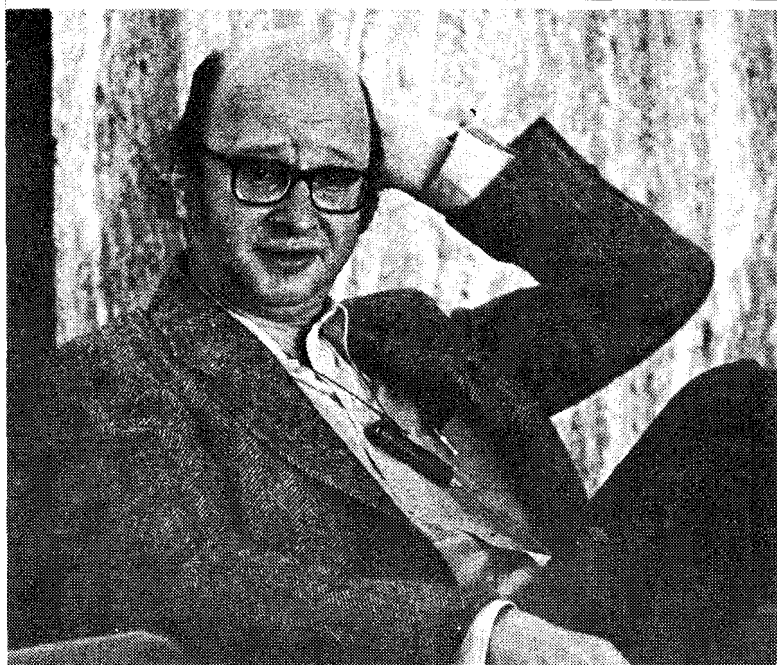
ASCIT President Bert Wells has come up with several ideas to "clean up" the ASCIT bylaws this term. Most of them are minor changes and he doesn't expect to have any problems in implementing them.

One change is to make the Teaching Quality Feedback Report an official ASCIT publication. This would mean that all publication funds would come from ASCIT and that TQFR Editor would be a salaried position, as is the case with both the *Big T* and the *California Tech*. In the past, the Dean's office has put out the TQFR with volunteer help. Wells thinks that the bylaw changes he would propose would "more accurately describe the present situation."

Secondly, according to Wells, the BOD feels there is reasonable evidence that ASCIT needs more income, and is preparing to raise student fees, including *Big T* and *Tech* subscriptions, and ASCIT dues. This may require a bylaw change before it can be done.

A third change is a direct result of rumors of electioneering and coercion at ballot boxes in some houses during recent elections. "I have to emphasize that these are only rumors," Wells stresses. However, he would like to see the bylaws concerning election procedures changed so that the words "secret ballot" and "no electioneering" are somehow included.

Continued on Page Eight



Jules Feiffer, noted cartoonist, appearing at a Y sponsored event yesterday

Photo-Ed Rea

## Prize Scholarship Program Offers \$50,000 In Aid

by Kevin Drum

Some \$50,000 in scholarships will be awarded this year under the Caltech Prize Scholarships Program it was announced Monday. Applications for these scholarships, which will be awarded strictly on the basis of merit rather than financial need, may be picked up in the Dean's office and must be returned by next Friday.

According to Dr. Gary Lorden, chairman of the Financial Aid Committee, the money for the scholarships will be divided

between the Freshman Admissions Committee for distribution to incoming freshmen and the Financial Aid Committee for distribution to upperclassmen. 17 scholarships, ranging in value from \$1000 to \$2000 will be given to freshmen with the remaining money going to upperclassmen in amounts from \$750 (for those with no need) to \$1500. Lorden expressed the hope that the 17 freshman scholarships would put Caltech in a more competitive position with respect to other universities which are able to offer more financial aid.

In the past, merit scholarships were few in number and recipients were therefore chosen entirely by the Financial Aid Committee primarily on the basis of GPA. With a larger number of recipients, the differences in GPA between candidates is sometimes very small. Therefore, in order to

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## Haagen-Smit, Caltech Prof Famous for Smog Research, Dies At 76

by Henry Fuhrmann

Within the last two weeks, three professors emeritus at Caltech have died. They were Dr. Arie J. Haagen-Smit, Dr. William Noble Lacey, and Dr. Don M. Post.

Dr. Arie J. Haagen-Smit, Caltech professor of bio-organic chemistry, emeritus, and a pioneer in the study of air pollution, died of lung cancer on March 18. A distinguished scientist, he was the first to determine the chemical composition of smog. He died at home in his sleep at age 76.

A member of the Caltech faculty for 40 years, he was a leader in the battle against air pollution. He waged a virtual "one-man war" in seeking the



Dr. Arie Haagen-Smit

development of Federal and state standards and laws for controlling polluting emissions from industrial sources and motor vehicles.

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## Faculty Board Tables UASH Plan To Raise Standards

by Kevin Drum

A proposal to raise the GPA needed to graduate with honors from 3.2 to 3.5 was tabled by the Faculty Board in a unanimous vote at its Monday meeting. The proposal, submitted by the Undergraduate Academic Standards and Honors Committee (UASH), was designed, according to UASH Chairman Charles Wilts, to halt accelerating grade inflation which has raised the average GPA of a graduating senior .5 points in 15 years.

55% of the senior class graduated with honors last year, a situation which Wilts said made it "commonplace" rather than an actual honor. "When over half the class graduates with honors, it becomes more of a stigma not to get it than it is an honor to get it," he explained. Just the opposite view was expressed by ASCIT President Bert Wells who attended the Faculty Board Meeting to argue against the move. He said that the 60% figure puts Caltech in line with other universities of Caltech's stature.

Wells suggested that a three-tiered approach be used for awarding honors at graduation similar to that used at many other universities. He proposed that instead of a flat 3.2 GPA requirement, a senior could graduate with honors with a 3.2, with high honors with a 3.5, and with highest honors with a 3.7. Wilts, on the other hand, says that if 55% of the class is graduating with honors, then perhaps the award would be stopped altogether. "It doesn't really mean anything outside Caltech," he said. "It isn't a whole lot more than good public relations." Wells turns that argument around, saying that since graduation with honors does little more than make the honored graduate's parents happy, why not make more parents

## 10% Of Freshman Class Reviewed

10% of the freshman class was declared ineligible to register for third term to make a total of 54 students who had to petition for reinstatement this term. "I felt that it was an unusually large number of freshmen," commented Charles Wilts, chairman of the Undergraduate Academic Standards and Honors Committee (UASH). In addition, about 20% of the freshmen taking Ph 1 failed this term, an unusually high number according to physics instructor Ricardo Gomez.

Part of the reason for large number of freshmen being declared ineligible may be a change in procedure at the Dean's office.

Freshmen who fail 27 units or more are now required to see the Dean for reinstatement. Altogether, out of 54 students declared ineligible, 36 of them petitioned for reinstatement and all but four were approved. Dean of Students Ray Owen acted on 25 petitions with the rest going to UASH.

happy?

UASH's proposal came after an expanded undergraduate grade survey completed last September. The survey, according to Wilts, "made quantitative what everyone had known for a long time: that grades are going up." Three years were picked for study, 1960-61, 1968-69, and 1975-76. 1968-69, besides being in between the other two is also the first year that optional pass/fail grading was allowed. The survey also checked for differences between optional and required courses.

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## Female Applicants Up 29%

## Frosh Applications Up, Test Scores Down

by Alan Silverstein

A year ago a good plurality of you reading this were scattered around the world anxiously awaiting word from a couple or more colleges whether or not you had made the grade. Now that you've become insiders, and a year's gone by, it's pre-frosh time again. Invisibly to most of us, the Admissions Committee and the Admissions Office are in the middle of their annual prime time, and this year they have more potential Techers to consider than in a long time. In a brief discussion this week with Ms. Barbara Brown, the Assistant Director of Admissions, I discovered, among other things, that 1390 applications for undergraduate admission to the Institute next Fall were received this year, up 18% from last year's

1178. The latter figure, in turn, was up 24% from 952 in 1975. ON that basis alone, the Admissions people have good cause to celebrate, for "most of the other colleges in the country are down," Ms. Brown said. "Because of the increase in applicants to Caltech, though, this year's pool of highly qualified applicants is about the same, if not a little larger than, that of the last."

Meanwhile, the subset of those applicants who are of the female persuasion has also dramatically increased to 151 from 117 last year and 82 the year before, a total rise of 84% in two years. While this does not promise that a record number of new women will be arriving next September—only qualified applicants are accepted, regardless of such

personal characteristics—but it's a healthy sign. Said Ms. Brown: "My feeling is that we have to get a critical mass of women enrolled here and then it will be a somewhat self-reinforcing program, as fewer women will decline offers of admission."

The impressive numbers mentioned above are not just a fluke, but the results of very energetic public relations work this year. "Facts About Caltech" was sent to nearly twice the 5900 high school seniors who received it last year based on their PSAT scores. In addition, a special illustrated calendar which was not too expensive to print was mailed to Math and Science curriculum heads in thousands of high schools this year, in an attempt to attract attention to

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## Inside the Tech

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Architecture photo spread

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UASH statistics on the rise in GPAs at Caltech

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# Parry! Riposte!

The Editorial Page

## Honors At Graduation

The Faculty Board met Monday and voted to table a proposal that would have raised the GPA needed to graduate with honors from 3.2 to 3.5 (see story page one). This decision came on the same day that 54 Caltech students were declared ineligible to register for third term because of academic difficulties. It seems like an eerie coincidence.

The decision has brought with it several reactions, some agreeing, some not. There seem to be two schools of thought. The first, supported by ASCIT President Bert Wells and one-third of the editors, is that graduation with honors is not a terribly important thing. It doesn't mean anything to the outside world so there is no reason that a large number of students shouldn't graduate with honors. They are among the brightest students in the country anyway and there is no reason not to try and make as many sets of parents happy as possible.

The other school of thought, supported by UASH Chairman Charles Wilts and another two-thirds of the editors is that graduating with honors is something that may mean something to many people. However, whether or not that is true, they feel that by honoring over half the students, it becomes a stigma not to graduate with honor rather than an honor to do it. They feel there is no reason to make so many people feel bad.

There doesn't seem to be any general agreement on the question. Several compromises have been suggested, including dropping graduation with honor altogether and having three levels of graduation with honors. There will be a faculty discussion of the problem sometime in the near or not-so near future. If you feel strongly about it, try to let UASH or ASCIT know how you feel, don't ignore it as almost everyone on this campus does with every other question.

—Kevin Drum  
Henry Fuhrmann  
Al Kellner



54 declared ineligible

### P.E. Curriculum

To the editors:

About a year ago, I and some friends went through a lot of trouble to get a class started Tai Chi Ch'uan. We felt that there was a large demand and desire to have the school support a class in Tai Chi. About 40 people were paying for a Tai Chi class which met 6:00 in the morning, which should be an indication of how much people wanted to learn Tai Chi Ch'uan.

Maybe I'd better tell you first what Tai Chi Ch'uan is. Tai Chi Ch'uan is a Chinese exercise system which activates the body for the development of physical, emotional, and mental well-being. It produces a feeling of tranquility and a clearing of the mind that western exercise does not.

We were trying to get this started as a P.E. course. After all, every college I can think of with the exception of Caltech and Ambassador College, offers Tai Chi in its physical education curriculums. We got one of the best demonstrations of buck-passing and run-around we've ever experienced.

The head of the physical education department, Warren Emery, wasn't any help. Everytime someone went in he'd just give another reason why Tai Chi shouldn't be in the curriculum. For example, he felt that Tai Chi wasn't physical or strenuous enough to be offered as a P.E. class. That makes me wonder how sailing got on the curriculum. Then it was said that the chinese students always stuck together and formed a group and that the Physical Education department shouldn't have to pay for an activity solely for this special interest group. Anyhow, there wasn't any more money. And, he didn't have the authority to start new classes anyway. So he referred us to a faculty committee. Incidentally, only about one quarter of the people in the Tai Chi classes were chinese. So a friend talked to the chairman of that committee and we basically never heard from anyone again.

Damn! For \$3500 a year, I'd like to be taught what I want to learn. So could people start making it easier to add to and diversify the physical education curriculum? I believe other people had the same problem with a horsemanship class.

We postponed classes in Tai Chi in hopes of getting it started as an institute-sponsored one-unit physical education class. But since that isn't working, we'll have to start private classes to accomodate the demand.

—Moses Ma

[For details on the class, see the news brief on page 3. —Ed.]

### Guys and Dolls

To the editors:

I would like to know why the *California Tech* did not print any pictures from the performances of *Guys and Dolls* either March 4 or March 11.

Instead, the March 4 edition ignored the musical completely and the March 11 edition printed one rehearsal picture and two pages of pictures of Clear Days.

## Letters to the Tech

Now Clear Days was interesting and important, but I didn't see one student or faculty member in the Clear Days picture spread. *Guys and Dolls* employed 120 students, faculty, staff and friends of Caltech and it would certainly have been appropriate for some of their pictures to appear.

It certainly couldn't have been for a lack of pictures. I saw John Loo, Ken Yoshida, Dave Wheeler, Al Kellner, and Floyd Clark all taking pictures at various dress rehearsals and performances. And even if all of the above people did take only color pictures, I overheard two editors talking about asking the Alumni Association for money to print a color edition of the paper.

So please tell me what happened. If the *California Tech* is supposed to cover campus events, why didn't they have pictures of the musical? Also, why did the producer have to write the review of *Guys and Dolls*?

—Flora Boyer  
Student Activities

[The Tech apologises for the omission. —Ed.]

### Library Losses

Editor of the *California Tech*

In response to your recent editorial about book losses in the Millikan Library and the possibility of installing a detection system, I would like to indicate some of the problems involved.

Although the number of books lost was down about half last summer over the previous inventory, the cost of books and journals has risen. We also noted that higher percentage of missing books are being returned within a few years, which is a plus for library users.

With regard to detection systems, there are several problems:

1. PHYSICAL. There are complications with two entrances and exits at opposite ends of the lobby. Either there must be duplicate detection systems (doubling the cost), or the doors must be redesigned so that north is "in" and south is "out". This would cost \$15,000 I was told, because it is not just a matter of rehanging the doors. Another problem arises after 5 p.m., and weekends when the library attendant has to monitor people coming in. This means the incoming person should be channeled by the charge-out desk, but this would be difficult through the detection gates which are designed for outgoing traffic only I invite people to study this problem.

2. POLITICAL. With the CIT Administration biggies on the third floor, there is a lot of traffic in and out of Millikan Building, which has nothing to do with the library. What if some trustee's fancy watch or pace-maker sets off a false alarm?

3. FINANCIAL. The cost isn't quite the \$50,000 for the system, but there are continuing ongoing costs also. In addition to the original equipment and installation, there is a considerable cost for the sensing targets, and the labor to put them in. Also there are annual costs for service

contracts on the equipment, targets for new library materials and labor to attach them.

4. BUDGETARY. Whose budget should be tapped to pay for this equipment? Those Divisions who have lost the most? Each division equally? A special allocation from General funds?

5. SYSTEM COMPROMISE POSSIBILITIES. There are six companies actively engaged in selling detection systems to libraries. Some have more false alarms than others. None is so perfect that there is no way a determined thief can get by the system. What if some Caltech students can find a way of fooling the sensing devices? Would all of the expense be in vain?

For the time being I prefer to rely on Caltech's honor system and some closer checking of persons exiting the library. If everyone cooperates we will not need such elaborate and costly devices.

Johanna E. Tallman  
Director of Libraries

### We're an Equal Opportunity Employer

The *California Tech* needs writers and production crew. No experience necessary. Come on by our offices in Winnett Center or see Kevin Drum, Henry Fuhrmann, or Al Kellner in Ruddock House.

### THE CALIFORNIA TECH

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Editors-in-Chief  
Kevin Drum  
Henry Fuhrmann  
Al Kellner

Business Manager  
Ken Kroll

Sports Editor  
Rock Howard

Writing Staff  
Dick Beatty [Food], Judy Greengard, Sandy McCorquodale, David Ritchie [Entertainment], Alan Silverstein, Brett Van Steenwyk

Photography Staff  
Dave Wheeler [Darkroom Chairman], Ngaiman Chau, Talso Chui, Ray Gildner, Ken Li, John Loo, Tom Snyder

Production Staff  
Alan Boyar, Flora Boyer, Stan Cohn, Tom McCabe, Nick Smith

Circulation Manager  
Carl Lydick

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# All the News That Fits

**You Have Been Warned**  
You are being warned for the second time: the deadline for financial aid applications is May 1.

**Dancing Gardens?**  
Next Friday there will be a joint ASCIT-GSC party. *Blues Image*, a Grammy Award-winning band, will provide the entertainment. Edibles and potables will be on hand in abundance. Bring a date, or just wander by—everyone is welcome. The music will begin at 8 p.m. in Dabney Garden.

**Senior Snapshots**  
The deadline for senior photos for this year's *Big T* will be May 13. No photos will be taken after that date. The photos should be about 3" by 4" and in black-and-white. Please include name, option, and hometown when the photo is turned in. Please turn them in to Stan Cohn or Dave Wheeler in Ruddock or to Flora.

**Interested in Employment?**  
Are you in need of employment (full-time, part-time, summer)? Do you need assistance in writing your resume? Are you interested in salary offers as quoted from the College Placement Association? Would you like to receive a copy of the College Placement Annual 1977? Or, would you like some friendly conversation? Drop by the Caltech Placement Office, 8 Dabney Hall, anytime!

**Red Cross/Caltech Blood Drive**  
The annual Red Cross/Caltech Blood Drive will be held on campus April 13, 14, and 15 in Dabney Lounge from 11:00 a.m. to 3:30 p.m. Last year we had a tremendous turn-out and this year we will have an extra day and additional beds to accommodate the large participation that is expected due to an added incentive among the students: a keg of beer. That's right—someone has decided to donate a keg to the student house that successfully gives the most pints of blood during the Drive. So, come on down that day and roll up your sleeve—and perhaps your house will be rolling out the keg! Please set up an appointment to eliminate waiting. Call Connie Valentic, extension 2374.

**Undergraduate Summer Research Scholarships**  
The Physics Department has received a small grant for the Richter Foundation to pay the summer salaries of undergraduates engaged in individual research projects. At least six fellowships will be available: each fellowship provides \$100/week (10 hours/week) for up to ten weeks. Undergraduates who wish to apply should submit an application form to T.A. Tompeller (106-38) before April 15. Applications may be picked up at the Physics Office (103 E. Bridge).

**Millikan Book Sale**  
A Millikan Library-sponsored book sale will be held today in the Millikan Board Room from 8:30 a.m. to 1:30 p.m. Most items will be 25 cents.

**Guitar Classes**  
Caltech will again offer classical and flamenco guitar classes with guitarist Darryl Denning on Tuesdays, starting April 5. Classes will meet in Fleming music room, with beginning section at 4:30 p.m. and the intermediate section at 5:30 p.m. Classes are free of charge. Private instruction can also be arranged. For further information please call Mr. Denning at 650-1692.

**For Horror Film Buffs**  
Professor Roman Gubern from Barcelona, Spain is at Caltech for the Spring quarter. An expert on the history of the cinema, he will present an unusual two-hour weekly lecture-discussion meeting as part of Art 101, and a film show every Monday evening at 7:30 in Baxter Lecture Hall. The evening showings will be open to all members of the Caltech community.

**Journey To The Sun**  
The Southwest Museum will present a show entitled "Two Days In The Continuous Journey Of The Hopi" on April 16 and 17. Featured artists will be Parker Biddle, a contemporary artist from Arizona, Linda Lomahaftewa, a Hopi artist from New Mexico, Michael Sockyma, Manfred Susunkewa, and Evelyn Poolheco, all Hopis from Arizona, and the Sherman Indian High School Dancers. Also featured will be the Frank Poolheco Dancers, Richard and Rita Begay, Navajos from Arizona, Tirzah Honanie, who will demonstrate how Hopi bread is made, Pat Honanie, a Hopi, and Mary Honanie, a Navajo.  
The Southwest Museum welcomes you to join them at your leisure for an afternoon of activity. There is plenty of street parking on both sides of Figueroa Street. There will be sale of native food or you can plan on a picnic. The Southwest Museum is located at 4605 N. Figueroa Street, Los Angeles.

**Free Money Available!**  
All organizations desiring information about ASCIT funding should see Mike Schwartz, 22 Dabney, before April 15.

**Tai Chi Ch'uan**  
We will be starting classes in Tai Chi Ch'uan as soon as we can after a lecture and demonstration this Sunday evening, April 3 at 8 p.m. in Baxter Lecture Hall. The demonstration and class will be led by Daniel Lee of JPL, who is quite a phenomenal instructor. He won the National Golden Gloves Championship of China in 1948. He has a black belt in Karate and a brown belt in judo. He has an instructor rank in JKD (Jeet Kune Do—the way of the intercepting fist), a Chinese non-classical Kung Fu system conceived by the foremost martial artist Bruce Lee. Dan has had many years of intensive study in the theory and practice of Tai Chi under numerous masters from China. Beginning classes will probably be on Wednesday mornings at 6:15 a.m.. Classes will probably begin three days after the demonstration. Don't forget! Sunday at 8 in Baxter. Admission is free and those interested are more than welcome. If you have any questions, or want to take the class but can't make it to the demonstration, call Moses Ma at 792-0086.

**Sink The Bismark!**  
This week the Caltech Gamers bring you another naval miniatures game as the German fleet sails into the Atlantic. The action starts at 8 p.m. on Saturday night in Dabney Hall Lounge.

**Skip The Country**  
Limited funds have become available again this year to give "travel prizes" for which students can compete to support travel during the summer. As before, the competition will be limited to current Juniors presently enrolled at Caltech who expect to be enrolled next year. The application deadline for the award(s), if any, is April 29. Winners will be announced May 11. Students interested in competing for a prize should see Dean Ray Owen or Dean James Morgan. Check with Carmen in the Deans' Office if you would like to arrange an appointment to consider the possibilities.

**CCF Square Dance**  
The Caltech Christian Fellowship will sponsor its twelfth square dance tomorrow night in Brown Gymnasium from 7:30 to 10:30 p.m. Back by request is caller Bob Cottingham. The CCF invites everyone to join in the fun as "We'll learn as we dance . . ."

**April Fools**  
Today's Noon Concert features—appropriately enough—comedy by "War Babies." The April Fools' Day entertainment is sponsored by the Caltech Y, ASCIT, and the GSC.  
**Continued on Page Four**



## Get out and Pitch In!

### National College "Pitch In!" Week sponsored by Budweiser and ABC Radio is April 18 - 22.

All you have to do is get out and Pitch In! Get your fraternity, sorority or organization to pick up or paint up on campus or in your community. Then document your efforts with snapshots, films, press coverage, reports or diaries.



Your group can really aid the community, and the best projects are eligible for some terrific educational awards and commemorative "Pitch In!" T-shirts. So, please, get out and Pitch In! Help make this year's campaign the best ever.

For more information: Contact your Dean of Student Activities or write to "Pitch In!" Week, Dept. C, ABC Radio, 1330 Avenue of Americas, New York, NY 10019.

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## ALL THE NEWS THAT FITS

Continued from Page Three

### Big T Begins

There will be a meeting this Saturday at 2 p.m. in the *Tech* offices for anyone interested in joining the *Big T* staff for the 1976-77 *Big T*. Please feel free to drop by if you are at all interested in joining. It would also be appreciated if those people doing the house sections would contact the Big T and let us know who you are.

### Marxism Lives

This week Cinematech opens its spring series with two classic Marx Brothers films, "Duck Soup" and "The Cocoanuts." Show starts at 7:30 p.m. Saturday in Baxter Lecture Hall. Admission is \$1.50 general, \$1 ASCIT, and \$.75 for children under 14.

### Recruiting on Campus

Four organizations will be recruiting on campus for employment during the month of April. On April 27, U.S. Navy Officer Recruiting will be interviewing BS and MS candidates in Engineering and Science. American

Hospital Supply Corporation will be on campus April 6 and 7 to interview BS and MS candidates in Mechanical Engineering, Electrical Engineering, Biology and Chemistry. On April 11, the Ryan-McFarland Corporation will be interviewing BS and MS candidates in Computer Science. PhD candidates in Chemical Engineering may sign up for interviews with Hercules Incorporated on April 25th. If you have any questions concerning these organizations or if you wish to sign up for an appointment, call or drop by the Placement Office, 8 Dabney Hall, x2362.

### Student Shop Elects Officers

The Student Shop will hold a meeting of all members on Saturday, April 9, at 1 p.m. Election of President/Treasurer for 1977-78 will be held at that time. If interested in running, contact Doug Carlson at 578-1672 any morning of the week. Also, the shop and the storage lockers will be cleaned up. If your locker hasn't been re-labeled, show up and claim your stuff. Refreshments will be served.

## The Week In Review

by Kevin Drum

The Supreme Court upheld the "Miranda Rule," by a 5-4 vote, which surprised many gain arms control agreements states had urged the court to abandon the rule, which limits police questioning of suspects without the presence of counsel.

Organized labor suffered two defeats this week. The House defeated a bill which would have allowed one labor union to shut down an entire construction site even though it was picketing only one subcontractor. The next day, President Carter called for an increase in the minimum wage to \$2.50 per hour rather than \$3.00, as endorsed by the AFL-CIO.

Former President Gerald Ford claimed Sunday that Pentagon "inflexibility" was a major factor in his failure to gain arms control agreements with the Soviet Union. On the same day, Secretary of State Cyrus Vance stated that significant cuts in nuclear arms is essential for serious reduction of the arms race.

Soviet Party chief Leonid Brezhnev delivered his toughest speech in five years, claiming that the Carter Administration must stop its human rights campaign if it wishes to develop normal relations. "Washington's claim to teach others how to live cannot be tolerated," he said.

Indian Prime Minister Indira Gandhi went down to an overwhelming defeat in India's first free elections in over two years. She was succeeded by 81-yr.-old Moraji Desai, leader of India's Janata Party. Desai had previously spent nineteen months in jail during Gandhi's emergency rule, which she lifted earlier this year to allow the elections.

The L.A. Times reported that it has learned that the Pentagon is working on a program to develop a missile which can knock a Soviet satellite out of orbit. The report came from a classified report obtained by the *Times*.

Two 747 jumbo jets flown by Pan Am and KLM collided on a runway in the Canary Islands killing 574 passengers and crew members. It was the worst disaster in aviation history.

"Rocky" won the Academy Award for Best Picture Monday night while the late Peter Finch and Faye Dunaway won best actor and best actress for their roles in "Network." Beatrice Straight was awarded an Oscar for best supporting actress for her role in "Network" while the best supporting actor award went to Jason Robards for his portrayal of Washington Post Executive Editor Ben Bradlee in "All the President's Men."

President Jimmy Carter announced that he will accept an invitation to resume talks with Hanoi that might lead to normal relations with Vietnam. The talks will take place in Paris.

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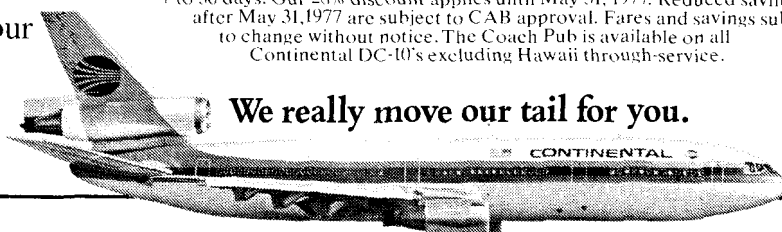
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**CONTINENTAL AIRLINES**

The Proud Bird with the Golden Tail.

## Entertainment Calendar

by David Ritchie

### Friday, April 1

For a fiery, fast-moving, fun-filled show, don't miss the spectacular Jose Molina Bailes Espanoles, coming to Beckman Auditorium, for one performance only, tonight at 8 p.m.

Jose Molina has been touring with his company of 12 musicians, dancers, and singers for more than ten years. He was formerly first dancer with Jose Greco. Three dance forms dominate Molina's work: "clasica espanole, flamenco, and then there is the folkloric, the dancing of the Spanish peasant, where we jump all over the stage." "When I dance flamenco," continues Molina, "I am in another world. I love the deep lament of the song, the flair of the guitar, and the fireworks of the footwork." The lavish wardrobe for this spectacular was created in Madrid by some of Spain's foremost designers.

Student rush tickets will be available for one dollar one hour before the performance begins.

\* \* \* \*

The Matrix Theater on Theater Row in Los Angeles will present a Friday night series of midnight jazz/rock concerts titled "Midnight at the Matrix" beginning TONIGHT. This new concept late-night theater entertainment will feature, as permanent hosts, renowned musicians Bob Goldstick and Mary Margaret Phillipi, and introduce The Matrix Family Band, a five-member musical ensemble. Special guest-artists in the areas of comedy, music, dance, and mime will be set to appear on a weekly basis. For ticket information and reservations, contact the Matrix Theater, 7657 Melrose Avenue, or call 852-9411 or 653-9725.

### Sunday, April 3

This Sunday, at 8 p.m., in Dabney Hall Lounge, the California Double Reed Quartet will give a free chamber music concert.

Maurita Thronburg (soprano and alto), Marsha Taylor (oboe), John Steinmetz (bassoon), and Patricia Mabee (harpsichord) will play music by Philbert de Lavigne, Bach, J. Steinmetz, Vaughn-Williams, Rameau, de Machaut, Seleses, and Francesco Landini.

### Wednesday, April 13

Angel City and Christopher Durang's *A History Of The American Film*, opening in repertory at the Mark Taper Forum,

Wednesday, April 13 and running through Sunday, June 5. Special low-priced previews for the two plays will be performed through Tuesday, April 12.

Hollywood is the subject with which both playwrights are concerned in these new plays. Duran's West Coast Premiere of *A History Of The American Film* is an affectionate and humorous look on screen images and their influence on popular culture, while Shepard's *Angle City* is a somewhat satirical and surrealistic view of the motion picture industry of the future.

Presented as the sixth and seventh productions of the Mark Taper Forum's 10th Anniversary Season, *Angel City*'s cast includes (alphabetically): Teri Garr, Larry Hankin, Loren Pickford, Paul Sand, Ron Silver, and Edward Winter. *American Film*'s cast includes (also alphabetically): Gordon Connell, Jane Connell, Barry Dennen, June Gable, James Gleason, Richard Lenz, Lu Leonard, Frank O'Brien, Alice Playten, Udana Power, Teri Ralston, Roger Robinson, and Robert Walden.

Tickets for regular performances, and special \$5 preview tickets, are now on sale at the Mark Taper Forum box office and most ticket agencies. For schedules and further information, call (213) 972-7211.

### Wednesday, April 13

The Earnest C. Watson Lecture Series continues with Dr. John Teem, Sherman Fairchild Distinguished Scholar from Caltech speaks on "Why Don't We Have A National Energy Policy?" It's at Beckman Auditorium at 8 p.m. and it is free.

### Friday, April 15

The 31st Annual Coleman Chamber Music Auditions. Auditions will be held all day long Friday and Saturday in Ramo Auditorium and the public is cordially invited to attend the competition. Auditions winners will perform on Sunday at 3:30 p.m. Tickets for this performance are \$3; \$1.50 for students.

### Friday, April 22

Ragtime pianist-singer-comedian Max Morath will appear at The Claremont Colleges Garrison Theater on Friday and Saturday, April 22 and 23 at 8 p.m. The popular entertainer-historian will offer his view of America during the turn of the century in his one-man show "The Ragtime

Years," blending music, humor, history, and satire into a bright and affectionate look at another era. "The Ragtime Years" not only explores ragtime piano music, but offers songs by Bert Williams, Irving Berlin, and other ragtime composers, some famed and some forgotten. Morath succeeds in bringing the period to life with his humorous insights into the history of the item. Tickets are available at the box office by phoning (714) 626-4523 with BankAmericard or Master Charge, or through Mutual and Liberty agencies.

## News Briefs

### Summer Research In Mathematics

A grant from the Richter Foundation will again this summer support research by Caltech undergraduates in mathematics. Six individual grants providing a stipend of up to \$950 for ten weeks are available. Application forms may be picked up in the Math Office (253 Sloan) and should be returned to Richard Dean (362 Sloan) by April 15. Any Caltech undergraduate may apply. Last summer research awards were made to Tom Kennedy, Charles Schlindwein, Claudia Spiro, Doug Tyler, Bert Wells, and Hugh Woodin.

### Unidentifiable Identification

TQFR survey letters will be in the mail this coming week. For collating purposes the numbers 0 through 9 appear on the questionnaires. It will be impossible to identify students by these numbers, so the survey remains totally anonymous. Return your questionnaires to the EPC soon!

## THE MARX BROTHERS

At Cinematech Tomorrow Night

## BOD Discusses Model U.N., ASCIT-GSC Party,

The ASCIT Board of Directors ended second term with two rather uneventful meetings on February 24 and March 3. Various BODies were present for the discussion of a proposed ASCIT/GSC party, and financial support for the Model United Nations. The summary:

President Bert Wells has brought up the matter of a proposed ASCIT/GSC party for third term. He has already met with G C President John Bloom to discuss the idea. As with last year's party, the total cost (about \$900-1000) would be shared equally by both student groups. After a brief discussion of potential sites (including the Millikan Board Room and the Gym), it is concluded that Dabney Lounge would be the most suitable place. Wells also mentions that the GSC is willing to let the BOD and the ESC select the band. The subsequent motion to advocate holding an ASCIT/GSC party is passed [Schwartz/Beausoleil: 4-0-3 (Sexton, Kaler, Fisher)].

The subject of funding for the Model UN is again brought before the Board. Doug Rountree repeats the request for \$200 to help his organization meet expenses for this year's trip. The problem, a cording to Rountree, can be traced to the loss of \$200 due to the graduation of a former member who was able to enlist the financial support of the Pasadena Model UN. Although the Alumni and the Dean's office have matched their previous

year's contributions (\$200 and \$500, respectively), ASCIT funding is still needed. Otherwise, the balance will have to come from the members' pockets. The motion to give the Model UN \$100 is passed unanimously [Kaler/Fisher: 6-0-0].

Other business:

Wells suggests holding a budget meeting early in third term. Treasurer Mike Schwartz announces that he is sending budget request outlines to the various interested clubs and organizations on campus; all requests will be due by April 15 (an appropriate date).

Prof. Harry Gray has accepted the "demanding" post of ASCIT Toastmaster.

The Y has requested that ASCIT and the GSC split the cost of \$600 for the noon concert [to be held today, April 1] featuring "War Babies", a comedy group. A motion is made and passed [Beausoleil/Fisher: 3-0-2 (Sexton, Kaler)], but allocates only \$200 to support the cost.

Beausoleil addresses the matter of continuing complaints about the coffeehouse. First, no food or drinks, and secondly, no comic books. Schwartz says that the comic books are coming back. Much of the problem seems to stem from the fact that the manager who previously ordered the food quit, leaving no one to order food. Schwartz reports that he has told them to get moving on the problem, but has received no reply.

## THE ASCIT FRIDAY NIGHT MOVIE

### FIVE EASY PIECES

7:30 p.m. & 9:30 p.m.

in Baxter Lecture Hall

ADMISSION: 50¢—ASCIT members

\$1.00—anyone else

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Red Sun

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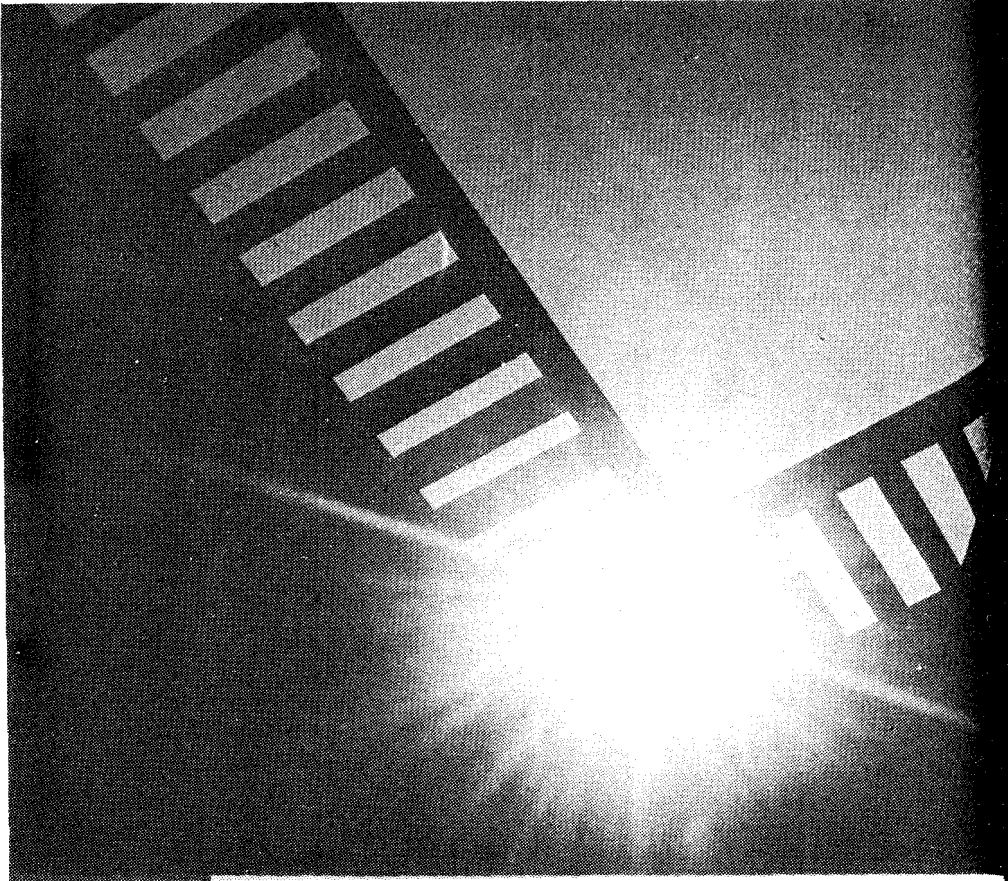
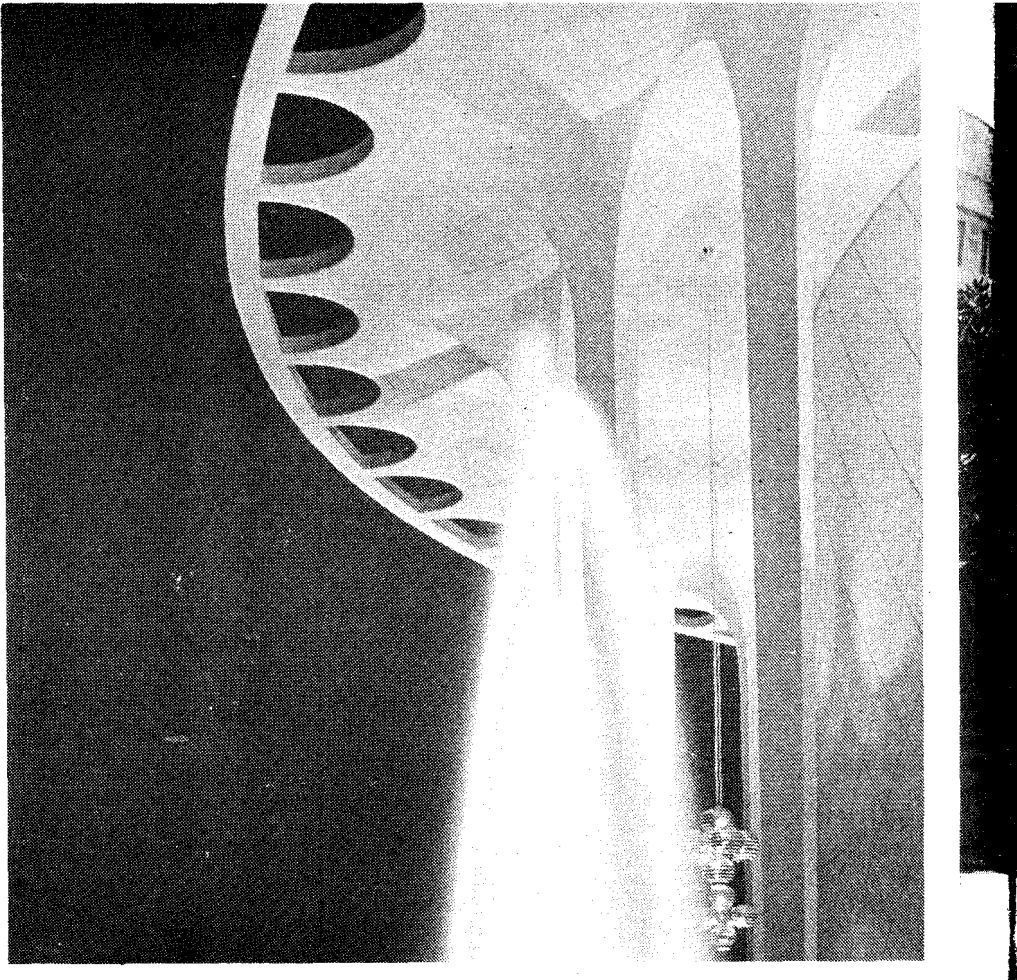
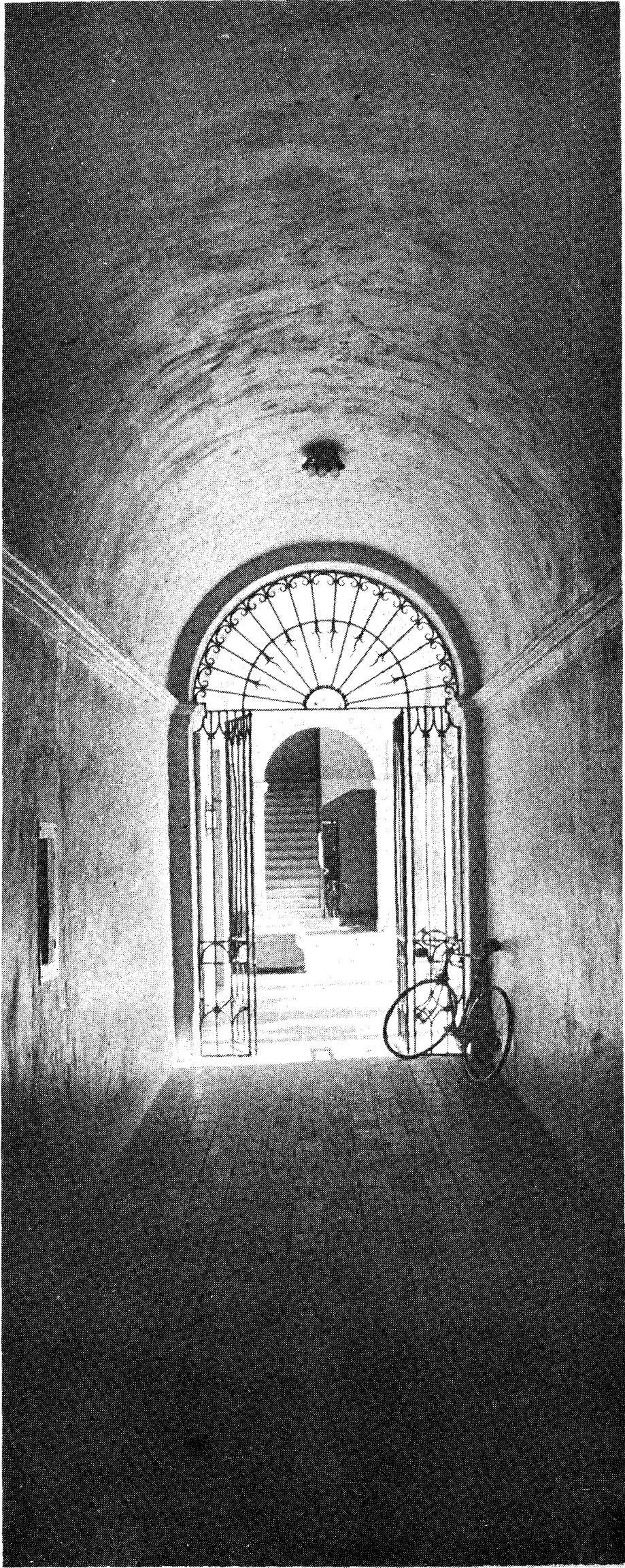
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LOCATED ON LAKE ½ BLOCK NORTH OF CALIFORNIA

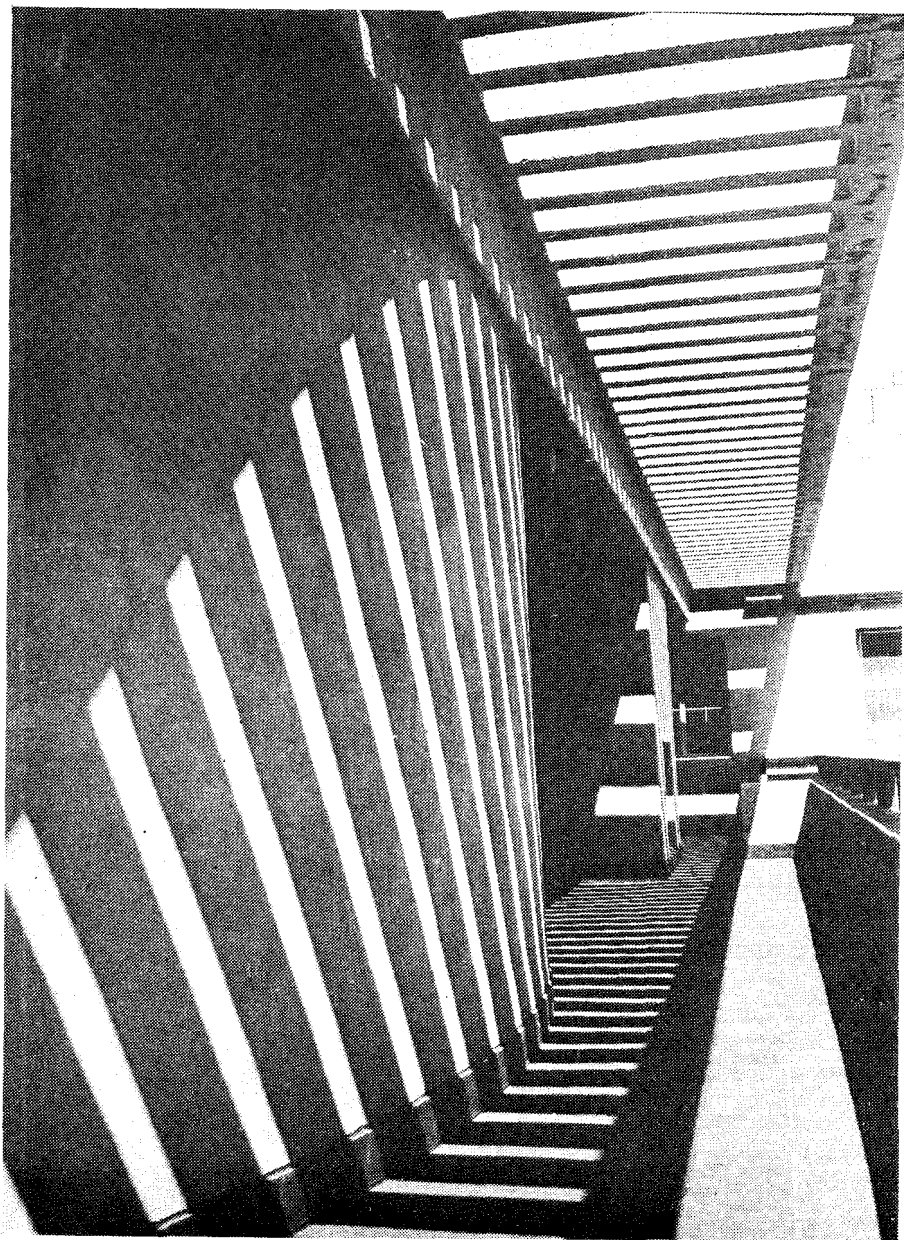
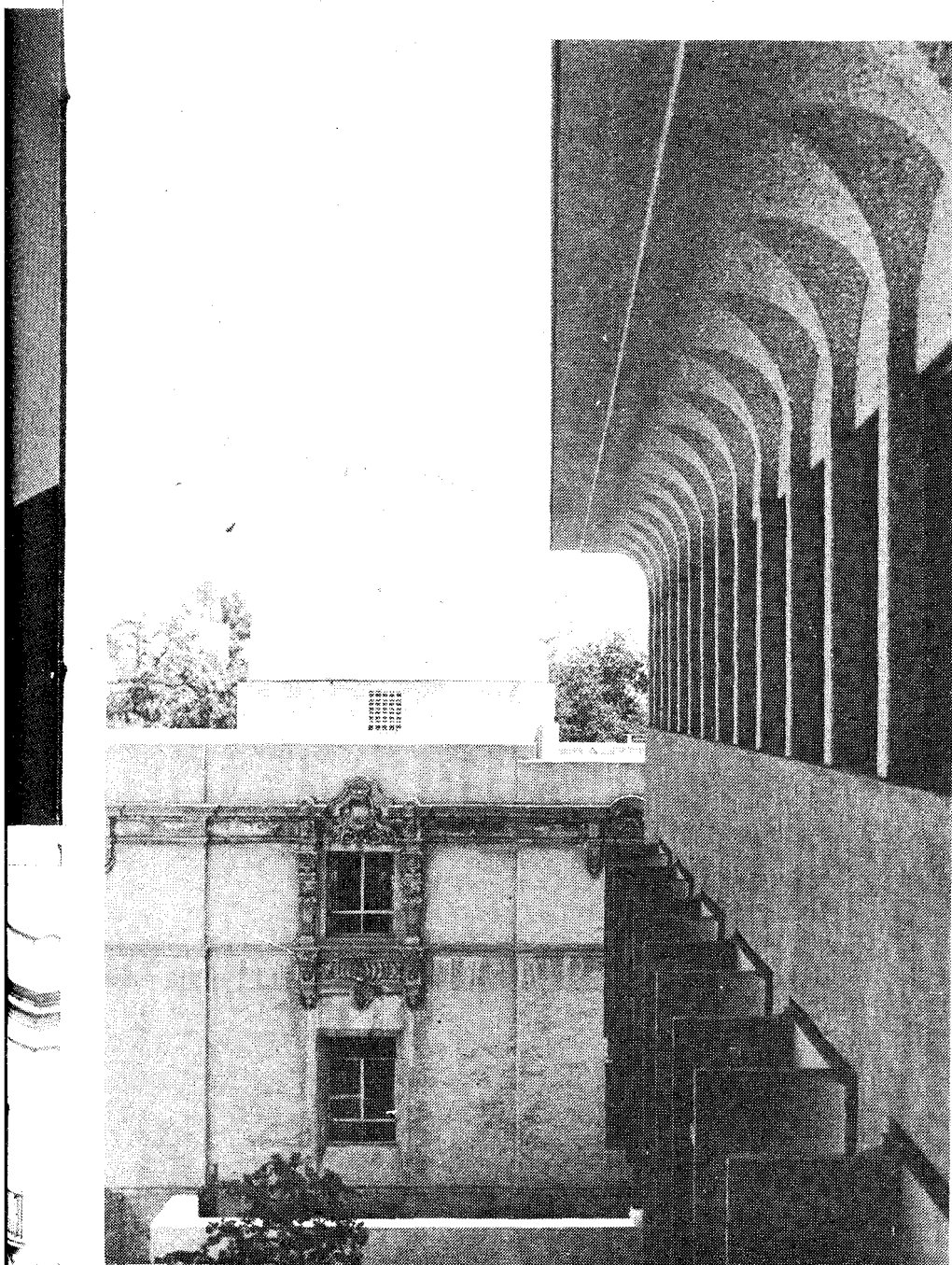
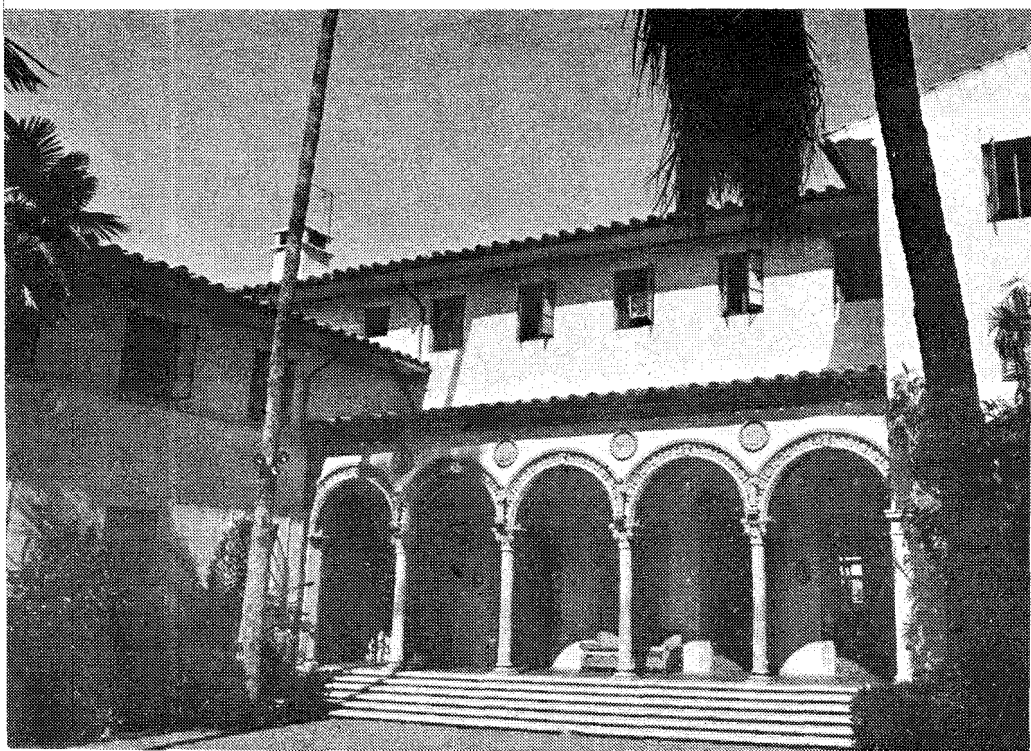
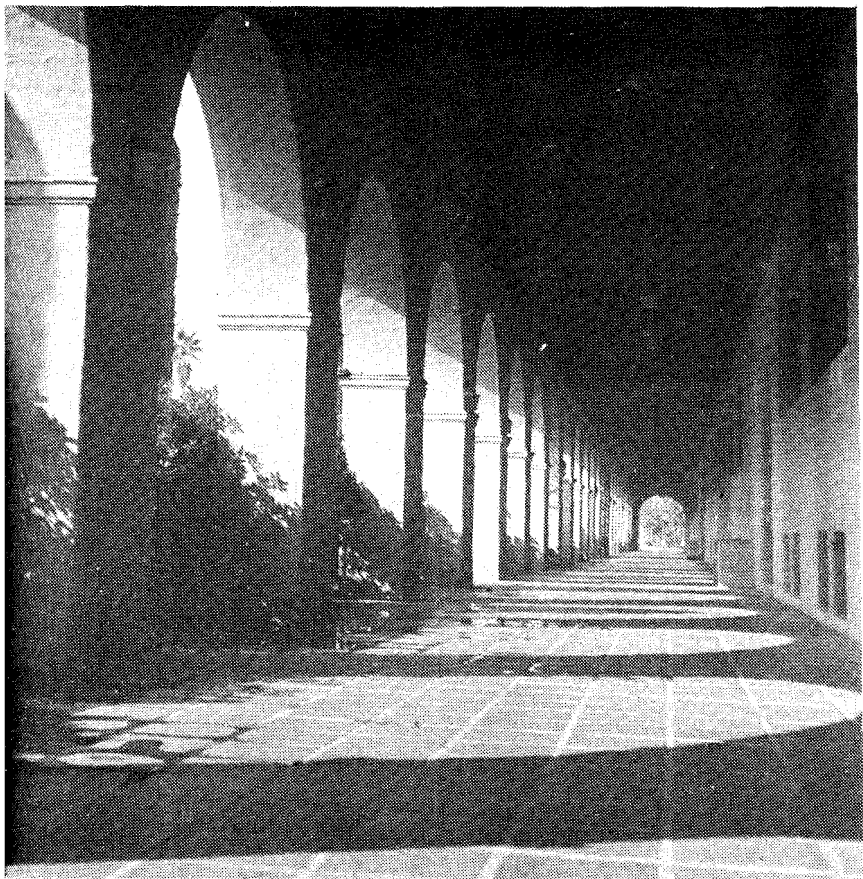
IT BEATS  
COOKING IN THE  
DORMS!



Campus Architecture







Photos by  
Ed Bielecki  
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Editor-in-Exile

# J'ai bu du Cafe Noir

Former Tech Editor-in-Chief Sandy McCorquodale is currently studying in France while on a year-long leave of absence from Caltech. His far-flung adventures on the Continent occasionally appear in these pages.

Still in Strasbourg, McQ is getting ready to take a four-week jaunt about Europe. Before leaving, however, he finds time to fill us in on the nuances of gender and foreign languages.

by Sandy McCorquodale

One difficulty that English-speakers have with foreign languages is coming to grips with nouns having genders, i.e. everything is assigned to this sex or that, or the other if your language happens to have neuter. A little logic can save a lot of useless memory work. Suppose we start with a rat (*le rat*), masculine. Our complementary objects should now be feminine,

and we do indeed find that a rat-trap (*la ratiere*) is feminine and a mouse (*la souris*) is feminine. Given that cats are used for mousing, we find that *le chat* is indeed masculine but fail when *le chien*, a dog, turns up masculine also. As a dog is man's best friend, it should be concluded that cats and dogs are trivial compared to most Frenchmen being gay old dogs.

Not all of these are abstract

opposites, some having cold biological logic behind them. In German, for example, we have *ein Schiff*, masculine, and *eine Flasche*, feminine. Obviously leading to *Das Schiff ist in der Flasche*. On the other side of the Rhine, French tells us that arms, elbows, necks and feet are masculine, but head is feminine.

Idioms are another barrier reef to a foreign language. The English, who speak English English, have an expression "to take French leave," which means to leave a room or meeting quietly, nobody noticing until after the fact. Take the hydrofoil across the Channel (*La Manche*, translatable by sleeve, hose and set of tennis) and the French describe the same action with *filer a l'anglais*.

If you think referring to English English is a bit pedantic, wait until you run into the English themselves. After being told how heavy one's accent is, sentences such as "Get my fags out of the boot" remain to be deciphered. The notion of English English being *the English* is pervasive throughout Europe. All the major French dictionaries translate The King's English as *l'anglais correct*. By the way, for those still rereading the second paragraph, if you tell the English you're horny, they'll send you to a doctor. The proper terminology (that's scientific English for you) is *randy*, which I have liberally italicized as a foreign phrase in righteous indignation and to put in a plug for the *California Tech* technical staff. You may not realize this, but every single time the type-face changes from medium to bold to to italic or to any special symbol a poor unballyhooed *Tech* staffer must take off the medium ball, put on the new ball, start the machine, wait until it stops, take off the new ball and replace the medium ball. Be grateful every time you see that type-face change.

A sort of linguistic warfare also takes place across the Pyrenees. The Spanish call a chatterbox a *parlanchin* while the French call a braggart a *hableur*. What is vital in comparing two languages is that it reveals how the two cultures look at both themselves and at each other. Consulting *Harrap's Standard French and English Dictionary*, a

mother of an attempt to collate two languages, curiosities abound. While Sears and J.C. Penney's make nary a show, Woolworth's is variously defined as *Monoprix*, *Prisunic* and *Uniprix*; similar French chain stores. Truman, Eisenhower, Kennedy, Johnson and Nixon are unheard of, but Mae West does put in an appearance.

As to that great American tradition of rooting for the underdog, the French just don't quite have the right word, making do with *se pencher sur les souffrances du peuple*. But they do have a word with exactly the same nuances and meanings as the English *abattoir*, which just goes to show that English will steal anything. Ack-ack is *Defense contr-avions* and also one of the few words in English with the accent on every syllable. Banner headlines are *des titres flamboyants*, *flamboyant* literally meaning flaming, blazing and fiery. (NB: not applicable to this paper.)

Even French law indulges itself at times. The crime of living on a prostitute's earnings is simply *delit de vagabondage special*. But Serbo-Croatian grammar makes these Western concerns pale by comparison. It seems that when one is counting things in Serbo-Croatian, one does not always use the plural when there is more than one object. Let us count some roosters: 1 *petao*, 2 *petla*, 3 *petla*, 4 *petla*, 5 *petlova*, 6 *petlova*, etc. For one thing, you use the nominative singular, but for 2-4 objects, you employ the genitive singular and from 5 on up to twenty you use the genitive plural. All very nice, but when 22 rolls around, you revert to the genitive singular up to 25, whereupon the genitive plural reasserts itself. Oh yes, for 21 you use the nominative singular. Simple, eh? If it ends in 1, nominative singular; 2-4, genitive singular; 5-9, genitive plural; except for 11-14, which are always genitive plural. Hence, 1001 *petao*, singular. As a side event, *covek*, a man (Serbo-Croatian has no articles), does not exist in the plural. *Ljudi* (people) is the genitive plural used in counting men. Just in case you're ever in the Balkans....

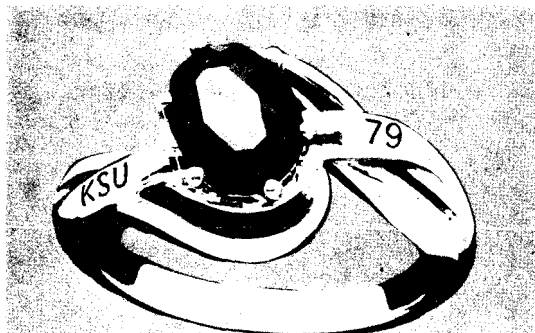
Continued on Page Nine

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## FROSH APPLICANTS UP

Continued from Page One

CIT's extracurricular activities as well as its science programs. Moreover, eight times as many women as last year were sent, also on the basis of the PSAT scores, a revised and expanded letter form current women students, after a productive trial of the idea last year.

While the pool of possibilities is bigger, it is also true that some of the test scores on standard entrance exams were lower than last year's record numbers, and none were higher.

What happens next, of course, is that the Admissions Committee will decide who to offer admission in the next week or two. Since financial offers are, as a matter of policy, made at the same time, the letters will not actually be ready for mailing until about April 14--but of course, all offers will be made simultaneously at that time, to about 380 people.

The target size for next year's class is still 220, as it has been for several years. Despite recent talk about the increasing size of the student body, there is and will be a housing crunch for a

while, so at a very predictable (based on precedent) "expected return rate" of 58%, that group of 380 pre-frosh would yield just the right number of frosh.

The *Tech* will continue to keep you posted on the Admissions story as it develops through third term, with the mailing of the offer letters and then the replies of the prospective Techers by May first.

## BYLAWS CHANGES

Continued from Page One

Any amendment must be approved by several groups before it actually is included in the bylaws. First of all, the Executive Committee, if it supports it, must draft the final copy of the proposed change and recommend it to the BOD. The BOD in turn decides on it, and if it passes, the amendment is voted upon in a campus-wide election. If two-thirds of the votes support the amendment, it then becomes part of the bylaws. Wells hopes that his proposed amendments will be on the ballot in the class elections in May.



## Y Sponsors Frosh Orientation

by Alan Silverstein

Add some spice to your life this week in the form of a variety of information from experts in several fields. Next week, the Caltech Y is featuring, in chronological order, the following open forums for interchange of ideas. "National Energy Problems" is the title of the talk to be given by Dr. Robert Seamans in the Y Lounge at noon on Tuesday, April 5. If you follow outside events (in the real world—that is), then you will recall that Dr. Seamans was the director of the Energy Research and Development Administration (ERDA) until recently. There could hardly be a better person for you interested ChemE's (and others) to meet with on the subject.

Frosh Orientation II continues on Tuesday, Wednesday, and Thursday evenings with opportunities for you nubile young potentates to learn the (cold?) hard truth from: Drs. Montgomery (Humanities) and Rossman (Geology) on the fifth, Dr. Bercaw, Dickerson, and Seinfeld (Chemistry) on the sixth, and Drs. Wilts and Cohen (Engineering) on the seventh. All talks will begin at 8 p.m., and all will be in Winnett lounge except for Humanities which will be in the Y lounge. Decisions, decisions . . .

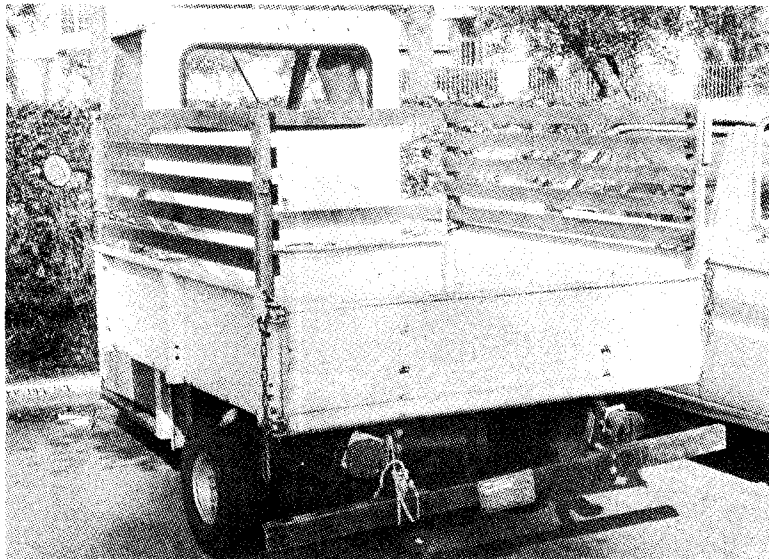
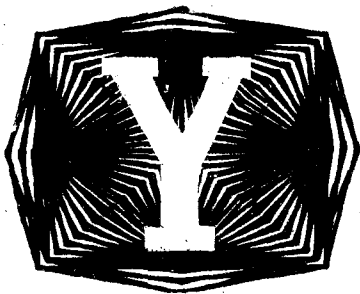
A special Y-sponsored Asian American History Class commences Thursday evening at 7:30 p.m. in the Y lounge. This two hour discussion group will meet at the same time and place for the next eight weeks to communicate on outside readings. It will be taught by David Asai, a graduate student in

Biology, who has conducted similar classes at Stanford and elsewhere. He says: "We will talk about immigrations, conditions in this country, important events of Asian-American history, and current issues for our communities. Asian-American history is a legitimate part of American history and it is not usually included in history courses—consider this a chance to learn another important aspect of American history." If the topic interests you, you are invited to attend, at no charge—contact the Y office.

Well, another year begins for a new Y Student Executive Committee—the largest ever in memory. Remember, the Y's schedule of events is chosen and administered by students; these people are your representatives: Debbie Henriquez (Blacker); Brian Dyer, Rock Howard, Alex Rivera (Dabney); Anna Slomovic (Fleming); Raymond Beausoleil, Matt Heffron, Jim Hunter (Lloyd); Dan Canin (Page); Dave Bradburn, Ken Campos, David Ritchie (Ricketts); Pam Crane, Peter Dewees, Jim Fruchterman, Yuri Owechko, and Bert Wells (Ruddock).

These people will be spending the weekend together to get familiar with each other and begin to plan the Y programs for the next three terms.

Be informed as well that ideas for programs (nay, even desires to run programs) may originate with anyone. If that means you, get in touch with one of the people listed, or talk to the Y staff. You'd be surprised at what a little program support might help you accomplish.



The space-age technology of the Caltech Safety Department is shown by the state-of-the-art high impact bumper recently installed on one of their vehicles

## J'AI BU DU CAFE NOIR

Continued from Page Eight

Meanwhile south of the Pyrenees: we encounter difficulties with the two fundamental verbs most languages are built on. You see, two verbs express 'to be' in Spanish, *ser* and *estar*; and two verbs 'to have', *haber* and *tener*. *Ser* is used to express an essential characteristic which is independent of the circumstances and *estar* is used in most other situations. *Haber* is used as the auxiliary verb instead of *tener*. But in these days of sexchanges and a legal communist party in Spain, is there any characteristic independent of its circumstances?

From all of this I leave you to puzzle out the logic and cultural meanings. Perhaps the fact that California is feminine in French, and Canada and Nicaragua are masculine will provide you with some lead.

And this irresistible tidbit comes from a recent *International Herald Tribune*:

\* \* \* \*

"Uganda's President Idi Amin

has, according to Uganda Radio, been asked by 175 Hawaiians to become their king and lead a fight for the islands' independence from the United States. Amin is seriously studying the request, according to the report, and will bring it up with U.S. authorities and Third World leaders. Meanwhile in Honolulu, leaders of five Hawaiian native-rights groups have discounted the Uganda Radio reports. Spokesmen for four of the groups said they weren't looking for independence providing there was redress for violations of land rights. Peggy Ross, leader of the more militant Ohana O. Hawaii, said she did not write to Amin but believes he could have gotten ideas about Hawaiian independence on his own after reading a letter sent to the UN Security Council in 1973. "We declared war against the United States when President Richard Nixon was in office," she said, "and proclaimed our sovereignty and independence. The Security Council wrote back saying we were not a nation and so they couldn't help us." "

\* \* \* \*

To close, thighs are feminine, and while the quantum is around, I can't seem to find a quark anywhere.

## CALTECH PRIZE SCHOLARSHIP PROGRAM

Continued from Page One

reduce the dependence on GPA, Lorden has suggested that a committee be formed by ASCIT that will compile dossiers on likely candidates and report to the Financial Aid committee.

This committee, which will be appointed by the IHC rather than ASCIT, will consist of seniors only. According to IHC Chairman Eric Kaler, the house presidents were told at Wednesday's IHC meeting to find candidates for the committee and report back at next week's IHC

meeting (April 6). The committee will be appointed at that time.

The self-help level at Caltech—the amount of money that students are expected to pay themselves either through work or long-term loans—has stayed the same this year at \$2000 for freshmen and \$1800 for upperclassmen. According to Lorden, merit scholarships would be applied toward the self-help that a student is expected to pay so that the Prize Scholarship would not reduce the outside financial

aid that a student might be getting.

Caltech's self-help level sets it in a fairly good position with respect to other universities of a similar caliber. MIT, for example, recently raised its self-help level from \$2300 to \$2500.

For the past four years the Caltech Prize Scholarship Program has been operating under a fairly low level of funding (\$20,000) under the Carnation Scholarship program. Eight of these scholarships were given this year to incoming freshmen

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## BUSCH

When you believe in what you're doing,  
you just naturally do it better.





# FACULTY BOARD TABLES UASH PLAN TO RAISE STANDARDS

**Continued from Page One**  
The report showed that while the median GPA of graduating seniors has risen about .5 (from a B- to a B+), the median GPA of all Caltech undergraduates has risen only .33 points in the 15 year period under study. Table 1 shows the grade distribution on a

divisional basis (more detailed records are in the UASH files). Although all the disciplines show considerable variation, the survey states that it is "fair to say that they all show a substantial increase with only three exceptions: Ph 2, Geology, and Chemical Engineering, all of which show essentially no variation.

Perhaps one of the most revealing parts of the survey is the data on pass/fail grading. The report says: "The large number of pass/fail grades in 1969 and 1976 seems surprising at first glance—11% in 1969 and 20% in 1976. On examination, it is found that this does not represent a large scale use of the pass/fail option by the students. Two-thirds of pass/fail grades were imposed on the entire class by the instructor and only about one-third of them were elected by the students."

UASH's statistics show that about 7.3% of the grades in classes which were normally graded were pass/fail. In science courses, the percentage was 5%, as it was in engineering, and, as expected, it was three times higher, 17%, in humanities. The use of pass/fail grading was only about a third of what is allowed

by the Institute. UASH identified four possible causes of the increasing GPA. They were (1) judicious use of pass/fail grading, (2) better students, (3) more liberal (easier) grading, and (4) greater freedom to choose a study program of interest to the student.

The committee concluded that since the pass/fail option is exercised only 7% of the time, (1) does not affect GPAs, on the average, by more than .05.

However, the report says that items 2, 3, and 4 are not easy to judge. CEEB test scores, according to the report, have shown a slight improvement over the years. However, statistics from the Admissions office show that in fact scores have remained the same in nearly all areas except for a drop in SAT verbal scores. So, it is not at all clear that students are any better now than they were 15 years ago. However, the report also concluded that course content has become more demanding in recent years. This "Necessarily requires a subjective judgement," says Wilts, "but I believe that these factors nearly balance."

The report suggested that the real answer was that grading has become easier of late. When the curricula changed from more or less prescribed to sequences with great freedom of choice, grading may have become more liberal because professors subconsciously feared that a reputation for tough grading will turn students away.

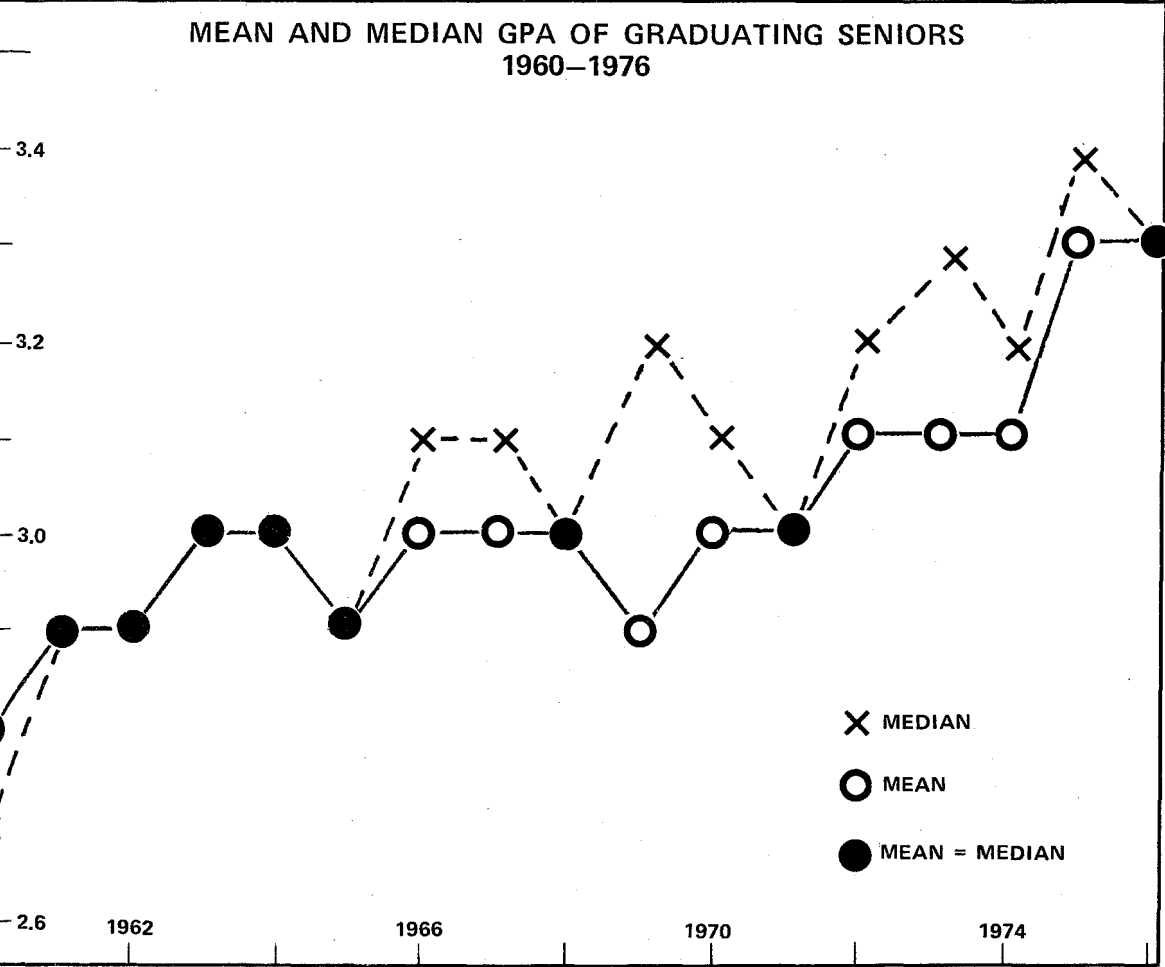
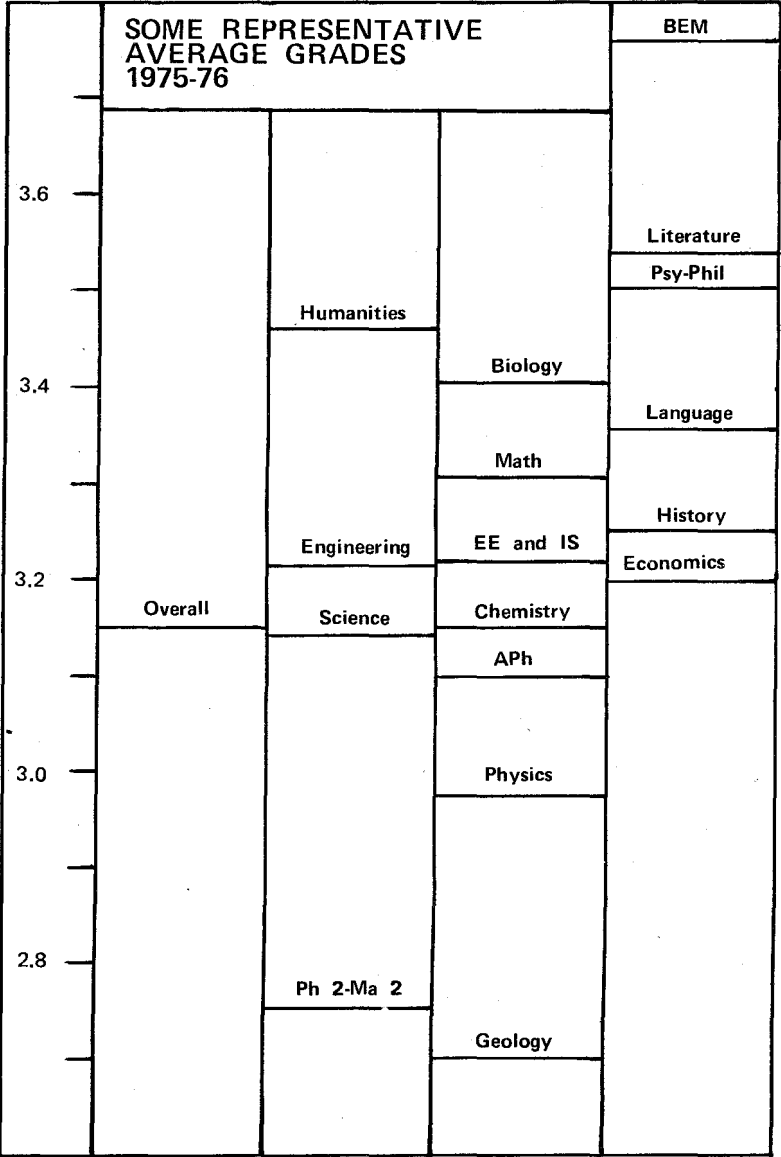
Point (4) is possibly the hardest to judge. With the greater

GRADE PERCENTAGES								
SUBJECT	YEAR	NO. OF GRADED UPPERCLASSMEN	%A	%B	%C	%D	%F	GPA
Ma 2 and Ph 2	1960-61	896	24	32	30	9	4	2.63
	1968-69	1012	17	37	28	12	5	2.49
	1975-76	952	29	36	21	8	6	2.76
All Science <sup>1</sup>	1960-61	2700	29	39	24	5	3	2.89
	1968-69	2644	36	38	19	4	3	2.97
	1975-76	1793	45	34	15	3	4	3.14
All Engineering <sup>2</sup>	1960-61	1181	22	33	34	9	3	2.62
	1968-69	754	27	39	29	3	1	2.87
	1975-76	1002	47	33	15	2	2	3.22
All Humanities	1960-61	2199	34	40	19	4	2	2.99
	1968-69	1855	43	38	14	2	3	3.16
	1975-76	1450	61	29	7	2	2	3.45
Institute Overall	1960-61	7350	29	37	25	6	3	2.74
	1968-69	6592	34	38	21	5	3	2.83
	1975-76	6232	45	34	14	4	3	3.15

(1) Excluding Ma 2, Ph 2, AMa 95 (2) Excluding AM 15, AM 115, AM 116

Top right: grade percentage breakdowns from 1960 to 1976 by subject. Right: average grade received in the courses offered in each division. Bottom left: the rising GPAs of graduating seniors over the past 16 years.

emphasis placed upon interest in modern education, may professors recommend to students that they drop a class they are doing poorly in and take it over when they are more interested in the subject. This leads to another possible cause for the rising GPA which was brought up at the Faculty Board Meeting: judicious use of drops. Until several years ago, drop day was just a few weeks after add day. Now, with drop day just three weeks before the end of the term, students can drop classes they know they are doing badly in. This weeds out bad grades and raises the average GPA.



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# THREE PROFESSORS EMERITUS DIE

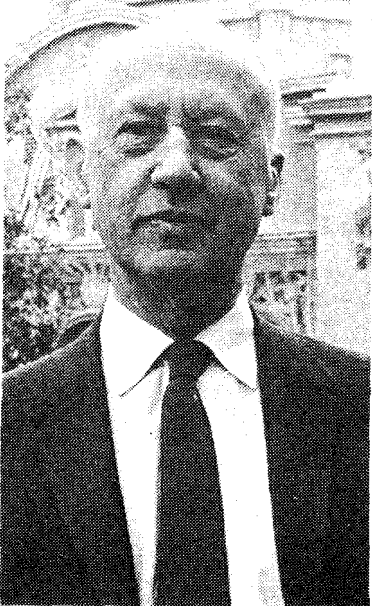
**Continued from Page One**  
Born in Utrecht, the Netherlands, Haasen-Smit earned a PhD in chemistry from the University of Utrecht (1929) and served on its faculty seven years. In 1936 he came to the United States to lecture at Harvard.  
A year later, he joined the faculty at Caltech, eventually becoming professor of biochemistry in 1940. He was named professor emeritus in 1971. His career interest was in the field of plant physiology. His work included the isolation of the flavor components of fruits and vegetables, research with alkaloids of cacti that lead to their use in the treatment of rare diseases, and the study of plant hormones.



Dr. Don M. Yost

“(His) interest was ‘life’.”  
Then, in 1957, he turned his attention to air pollution, which was quite bad in those days. “I felt it would not be difficult to find out what smog was. So I began.” What he determined was that air pollution resulted from

the photochemical oxidation of organics and nitrogen oxides that are formed in high temperature combustion.  
His work (he actually created smog in a test tube) made it possible to attack air pollution. He concluded that the oil and automobile industries were its main causes. Then his long crusade, which earned him the title “Father of Smog,” began.  
Several major studies subsequently reproduced Dr. Haasen-Smit’s results, yet it remained for him to “do the dirty work.” At first reluctant, he became a pioneer in seeking controls of pollution and took charge in a difficult situation. On one side he faced industrialists who called



Dr. William Lacey

him “tough” and on the other, he faced environmentalists who charged him with being lenient.  
From 1968 to 1973 he served as the first permanent chairman of California’s Air Resources Board. He also headed President Nixon’s air pollution task force.  
Throughout the often bitter fights, Dr. Haagen-Smit received calm, earnest respect for his “competence, interest, and humanity,” and honors for his vital work. These included nearly every major scientific award except for the Nobel Prize, which as he often noted, is not given in ecology. He was awarded the National Medal of Science in 1973 from the Smithsonian Institution, the \$50,000 Tayler Ecology Prize and the Rhineland Award for Western Europe.  
On a scientific level, it was said that “he undoubtedly knows more about airborne pollution than anyone else in the world.”  
On a more personal level, Dr. Robert Sinsheimer, Chairman of the Division on Biology, said “We’ll all miss his human warmth, as well as his scientific contribution.”  
Dr. William Noble Lacey, 86, professor of chemical engineering emeritus who served on the Caltech faculty for over 60 years, died in San Diego on March 26 after a heart attack.

He was well-known for his studies of the properties and behaviour of hydrocarbons, which are of great importance to the petroleum products and refineries industry.  
Advocate of the existence of case-study problems in teaching chemical engineering, he had a major impact on teaching methods.  
Lacey left his hometown of San Diego to attend Stanford, where he earned an AB in chemical engineering in 1911. He then went on to obtain his MS and Ph.D. degrees from the University of California before he came to Caltech in 1916. He served as professor from 1932 to 1962; he worked with A.A. Noyes and was professor emeritus for the past 15 years.

Lacey served as dean of graduate students from 1946-56 and as dean of the faculty, equivalent to provost, during the year 1961-62. Colleagues remember him as being very patient and thoughtful of others, “a gentleman of the highest class.” While dean of graduate students, he read every thesis and is said to have been able to discuss them, in every detail, afterwards.  
Honors bestowed upon Dr. Lacey included the Presidential Certificate of Merit (for his rocket work during World War II) and several professional awards and memberships. His “His gentle thoughtfulness and firm leadership,” as described by Dr. William Corcoran, lead to respect and admiration from his associates.

Dr. Don M. Yost, professor of inorganic chemistry, emeritus, died Sunday, March 27, of emphysema at Huntington Memorial Hospital in Pasadena. Known as a highly individualistic man, he was a member of Caltech’s faculty for over 50 years. He was 83.  
Dr. Yost’s wide-ranging research interest included inorganic and physical chemistry, chemical physics, carbon-14 dating, and rates of chemical reactions. Above all, he was concerned with, as he put it, “the care and feeding of scientists of imagination. His graduate students were allowed a great deal of freedom in their choice of research.  
Yost enrolled at the University of California (after service as an officer in the Navy during World War I) where he earned his BS in 1923. Three years later he earned his Ph.D. at Caltech where he became a research fellow and then an instructor in 1927. By 1941 he had risen to full professor. During World War II, he worked on the Manhattan Project as a section chairman of the Office of Scientific Research and Development. He was awarded the Presidential Certificate of Merit for this work.  
Dr. Yost served as professor until 1964 when he was named Professor Emeritus.

# Tennis Season Halfway Over

The Caltech tennis team was limited to one win in the first half of the season, a 7-2 defeat of Ambassador College. The team’s closest league match was a 6-3 loss to LaVerne. The league is very strong this year, although Redlands, as usual, looks like the strongest team.  
Eric Peterson, a Page house freshman, has the best record to date in both singles and doubles with three victories.  
The team line up for singles is Tim Ahern (Senior, Fleming), Eric Peterson (Freshman, Page), Lee Paul (Junior, Fleming), Dave Faulkner (Senior, Lloyd), Mike Aziz (Junior, Ruddock), Kevin Drum (Freshman, Ruddock), Dan Rimkus (Junior, Page), and Dean Brackett (Freshman, Fleming).  
The doubles teams, in order, are Ahern/Paul, Peterson/Faulkner, and Aziz/Rimkus.  
The addition of Greg Earle, a freshman from Lloyd, should strengthen the line-up and the team may be able to look forward to a few upsets in the coming matches.

# Track Team Coach Coaches More Than Tech

**by Tommy Trolljan**  
One would tend to think that track had ended last term as there seems to be a missing month in which there have been no track meets to speak of concerning the Caltech team. Many of the runners have been staying in shape. In fact, this Saturday, April 2, Caltech will have a home meet against Whittier and Claremont-Harvey Mudd. There are also a few more additions to the team. One of them is Tom McCabe in the 880.  
Track Coach Neal also is involved with other runners as well as those at Caltech. One of them is Kath Denz who almost won the mile in the 12-13 year old girls’ class in a meet featuring many of the best in the nation. Her time was 4:59—about an inch or two behind the record holder in that event, and only a few seconds behind the record for her age class.  
The season is still young . . .

# TRAVEL TROUBLES

**Continued from Page Nine**  
class places. For example, your BankAmericard can now be exchanged at the Bank of America for the international Visa card.  
Border authorities of a number of countries have been known to hassle students on charges of vagrancy, and admission to a country can be refused unless you can show proof of solvency. Keep a stash of cash or your return ticket handy in order to calm these beasts.  
If you do not have a mailing address abroad, you can have mail sent to you in care of Post Restante (General Delivery) at the central post office in the cities you will be staying. There is a small charge for each letter received.  
American Express will receive and hold mail for 30 days sent in care of their offices for clients of American Express (which, if you buy their travelers checks, means you). A free booklet, “Services and Offices” listing offices everywhere can be obtained from American Express International Headquarters, 65 Broadway, New York, NY 10006.  
Cook’s offices also hold mail, although only for two weeks, and locations of the offices are less central. A list of Cook offices is available from Thomas Cook and Son, 587 Fifth Ave., New York, NY 10017.  
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