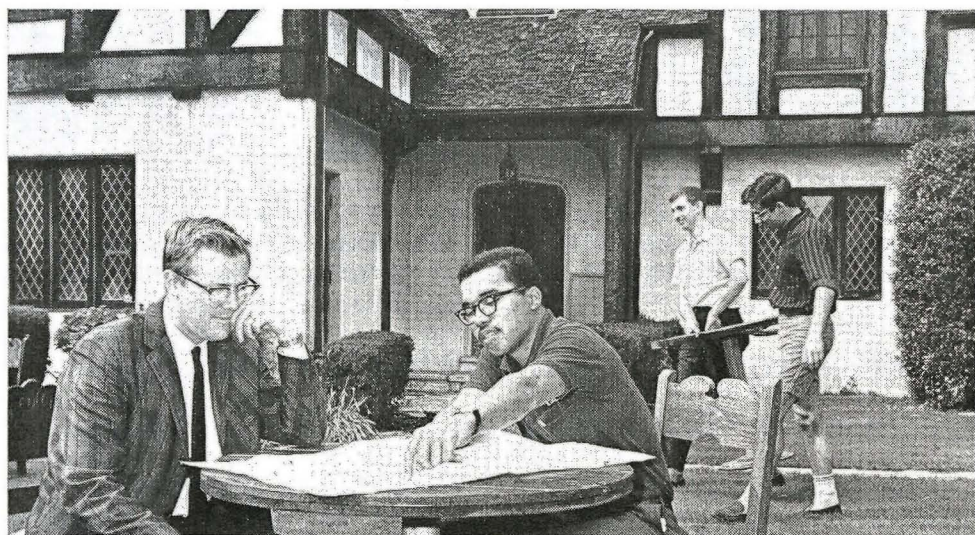


CALTECH NEWS

PUBLISHED FOR ALUMNI OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY

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ASCIT president Joe Rhodes (right), '69, shows a skeptical Robert Woodbury, assistant professor of history, how 100 people CAN be seated in the new coffee house. Meanwhile Peter Szolovits, '70, and Mike Meo, '68, carry in tables for early April opening.

Who Would Have Believed It? After Years of Talk, Students Finally Get Their Coffee House

Caltech students' long-standing wish for an on-campus or near-campus coffee house was realized early in the year when the Institute gave them the use of a house at 1101 San Pasqual Street. The building is one of three belonging to the Institute in the block between Wilson and Michigan Avenues and is directly across the street from the Norman Church biology building.

The administration applied for and received a zoning variance from the city to do necessary remodeling and assumed the cost of it which, to date, has totaled \$6,500.

In January ASCIT president Joe Rhodes, '69, then ASCIT activities chairman, spearheaded a fund drive among students, faculty, and staff; it netted close to \$5,000. This money is being used for decorating and furnishing the house, purchasing a music system, and for initial operating expenses.

The house was built in 1928 by the late Dr. Harry Bateman of the Caltech mathematics department. The Institute purchased it from his daughter in 1958 and rented it to faculty and, later, to graduate students.

It is a picturesque English-type stucco and frame structure with leaded windows. The students, limited in funds for decorating and furnishings, cannot carry out the old English theme inside. However, they will be able to take care of up to 100 patrons seated on chairs of vaguely Spanish derivation (which were used at one time in the old Greasy and donated to the coffee house by the Institute). From a local telephone company the students obtained a number of large cable

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D. S. Clark Awards Made; Gift Horse Eyed Suspiciously

The Donald S. Clark Alumni Awards, made possible by \$25,000 given to the Institute by the Caltech Alumni Association last year, were presented for the first time early in 1967. The award was established to honor Dr. Clark, long-time secretary of the Alumni Association, Caltech director of placements, and professor of physical metallurgy.

The winners, who got \$250 each, were chosen "in recognition of demonstrated potential leadership and good academic performance," with preference given to students in the engineering option. They are John Cummings, '69, engineering major from Albuquerque, New Mexico; Sam Logan, '68, physics major from Woodland Hills; William Martin, '69, engineering major from Arlington, Virginia; and Edward Seguire, '68, chemical engineering major from Montebello.

Alas, the natives were restless at the time the award was announced, and the *California Tech* editors (Mike Meo and John Middleditch), jumping into a fresh imbroglio, took issue with the conditions of the award. In an editorial headed "Brown-nose Awards," they noted that "It always warms our hearts to see Teckers receive awards; perhaps they ought to get

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Alumni Analyze Their Current State of Affairs, Then Ask the Institute for More Togetherness

For eight months during 1966 a group of 25 Caltech alumni ranging from class of '26 to class of '58 met, at the request of the Board of Directors of the Alumni Association, to scrutinize the state of alumni-Institute relations. Chairman of the Alumni Study Group was Bill Nash, '38, PhD '42, who, like 11 other members, was once a president of the Association.

The group began with four fact-filled briefing sessions by Institute officials and division chairmen, and by representatives of alumni organizations of other schools. Then, armed with a prodigious amount of background information, the group jumped into discussion of what, if anything, was wrong, and how to improve it.

Their primary conclusion was that new methods should be developed to restore some of the intimacy with Caltech that many alumni knew as students. The overwhelming criticism from Study Group members was that the alumnus's picture of Caltech is needlessly out of date. The primary means of ameliorating this would be improvement of the flow of information from the Institute to him, and many of the group's recommendations centered around this basic consideration.

The final report of the Study Group was submitted to the Association Board of Directors in November; the Board studied it and then sent it on to President DuBridge. Portions are now being discussed by Institute committees, and some of the proposals have already been implemented.

Specific points in the report included:

- The Association should exist for the dual benefit of its members and the Institute, with particular emphasis on providing ways for alumni to assist Caltech.

Caltech News has come into existence as a direct consequence of the Alumni Study Group's recommendations for improved communications between the Institute and its alumni. Unlike *Engineering and Science* magazine, which is received only by members of the Alumni Association, *Caltech News* is being received by all Caltech alumni (as well as the faculty and senior class). It is designed to complement *E&S* by providing news and features that alumni have expressed interest in, but which have not been feasible for inclusion in the magazine.

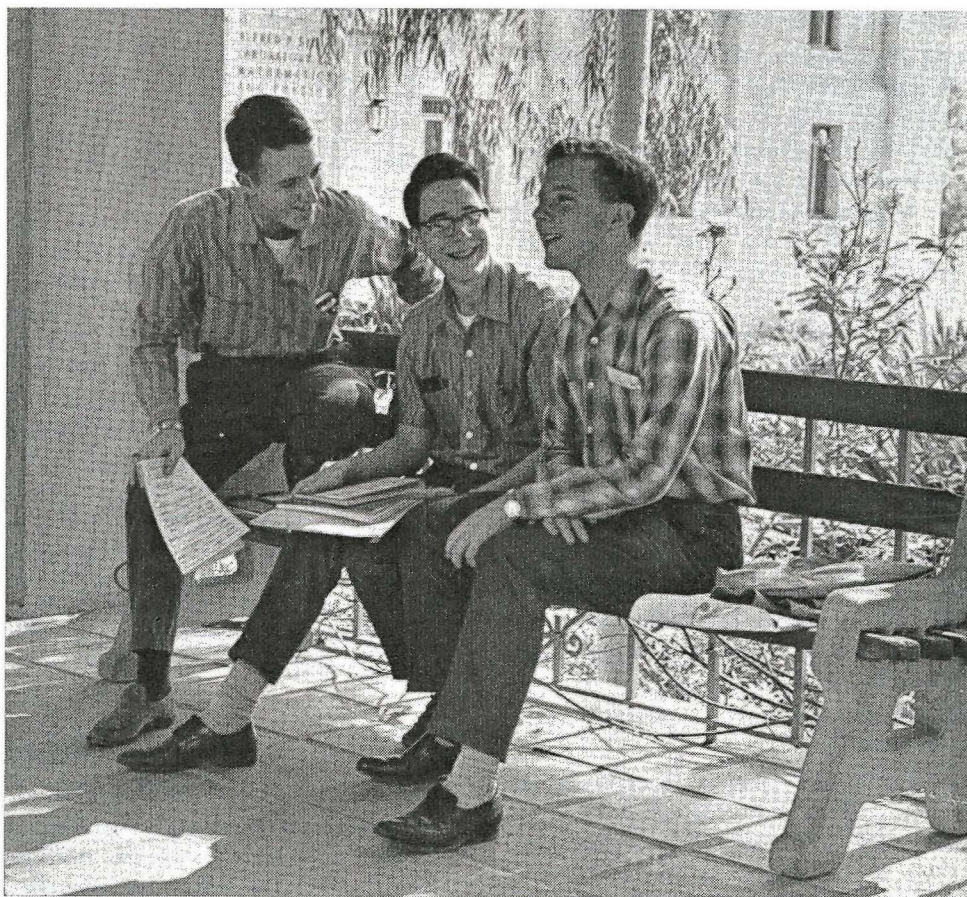
- Some way should be found to provide alumni with more information of the kind given to the Study Group during the briefing sessions; that is, insight into the Institute's current academic policies, its long-range goals, and the kinds of problems that it faces.

- The present communications medium (*Engineering and Science* magazine), while excellent for what it is intended, should be augmented with more diverse news

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THE FIRST TRIO of brothers enrolled simultaneously as undergraduates: the Schors of Visalia, California. Robert, '67, David, '70, and Marshall, '68. The two older Schors have honor standing; the youngest, of course, hasn't had a chance yet.

Alumni Forum: From the Troops to the Throops

Last summer Sid Gally, '41, president of the Caltech Alumni Association, sent letters to all alumni informing them of the work being done by the Alumni Study Group and inviting their ideas and suggestions for the group's consideration. Excerpts from some of the replies are printed here. In subsequent issues of Caltech News this section will be available for signed alumni letters. They should be addressed to: Editor, Caltech News, Publications Office, 10 Throop, Caltech, Pasadena, California 91109.

"The articles in the monthly Institute magazine (*Engineering and Science*) accurately reflect the current surgically clean policy of shunning the day's technical issues. And I don't like it one darned bit. The magazine says—in effect—look elsewhere for the solving of technical controversy; not here; we're on our way to the moon . . . So we leave the blood and guts problems of the day to the dumb, the distorters, the weak-minded. And we do nothing but grumble at the ignorance and misinformation that they wallow in . . . While Rome burns, we frequently do no more than hold a pyrometer on the hottest spots and . . . go on about our narrow-minded business."

"The Alumni Seminars are conducted at an elementary level, presumably to hold the interest of alumni families who are invited. That is fine, but it does little if anything for the alumnus. I wonder if it might not be worth considering a second annual event, say strung out over an evening a week for a month, and called 'What's New?' For the mathematician, we'd have a 'What's New in Math?' a series of two or three lectures of a couple of hours duration, at a rather advanced level, which would exhibit to the old grad what is going on (at Caltech) at the frontier stations."

"It strikes me that life today is an educational voyage that continues after one leaves school. You cannot, because of technological change, expect to be pumped full of current thoughts and have them last until you die. You must continue to learn to survive professionally and eco-

nomically. The four years or more of college are only a starter. And it is in this area of continuing adult education and updating that Caltech is doing very little."

"I suggest that the Alumni Association organize yearly symposiums, each on a specific local problem, to which would be invited local and national authorities, the Los Angeles City Council, and the Caltech faculty. The main purpose would be to educate the City Council with the opinions of highly educated non-government people, and vice versa."

"The easy problems today are the ones that are technological; the difficult and often the most important problems are the social and political problems, and their difficulty is often enhanced by technology. I think that Caltech should recognize this situation and help change it, through both education and research, and should enlist the help of those alumni who are already aware of the situation."

"Do you get any continuing feedback from graduates on the subject of what kind of school Caltech ought to be? I'm not thinking of the information you got from a broadside questionnaire that was sent out a year or two ago. What might be more useful would be a small panel of distinguished graduates who would assemble, say yearly, with representatives of the teaching faculty and the administration to discuss academic problems—not finance."

"I suggest that consideration be given to dropping the dues to the Alumni Association and having its activities supported by Caltech. All graduates would automatically become members of the Association. The effort that goes into membership campaigns could be devoted to raising funds for various purposes connected with the Institute . . . Payment of dues to the Alumni Association is not deductible, but a contribution would be. For the same net cost to most alumni of a \$5.00 membership, a contribution of \$7.50 to \$10.00 or more could be made."

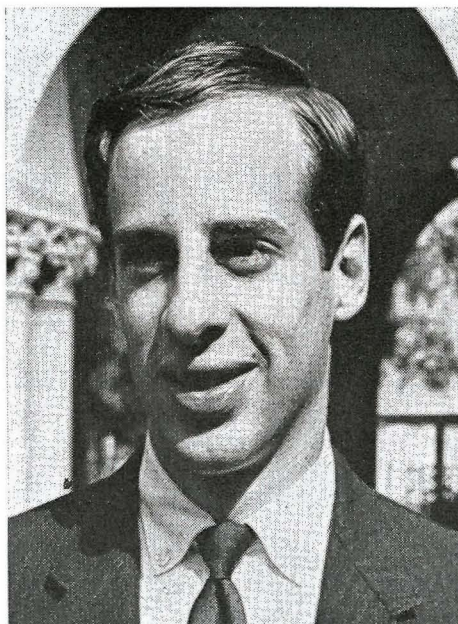
"Our alumni publication, *Engineering and Science*, and other features which the Association has sponsored in the past seem to be doing quite well in keeping individuals informed and encouraged. This should be continued and improved, when possible. I have no spectacular suggestions for improvement. I do have much appreciation for benefits I have derived."

"In the two years that I have been classified as an alumnus, all I have received from the Alumni Association are requests for money. Since I am existing on fellowships and cannot really afford to support anybody but myself, I feel that as far as your Association is concerned, I am dead (with the possibility of coming alive if and when I earn money)."

"I believe that in this day, with federal funding representing the significant portion of the Institute's budget, the Alumni Association and the traditional concepts of its meaningful support and leadership are anachronisms."

Webster Now on Alumni Board

Martin Webster, '37, an attorney in Beverly Hills, was appointed a director of the Caltech Alumni Association on December 6, 1966. He is filling out the term of Frank Lehan, '44, president of the Space-General Corporation, who resigned. Webster's term expires in 1968.



OFF OFF TO TO ENGLAND ENGLAND. Fred Lamb (left), '67, former ASCIT president, has a twin brother, Don (right), Rice University, '67, who is also a former student body president. Both won England's Marshall Scholarships, 24 of which are given each year for graduate study in England. Fred is going to Oxford, Don to U of Liverpool.



Quotes: Bradbury on Individualism; DuBridge On Institute Size; Beckman on Caltech Future

"When I was in Los Angeles High School 29 years ago, out of 4,000 students in the school I was totally alone in believing that some day a miraculous age called the 'space age' would happen. You can imagine what a lonely thing it was to be one student out of 4,000 who saw the rocket ship coming, who believed in it, who predicted it, and who wrote about it."

"To measure the depth of my madness, when I wrote the short stories about the space age in 1936, in short story class, I was the only student in the entire school whose short stories were not reprinted in the class annual short story volume. Because I was the class nut—right?"

"So if there's any message in this for you, it's: dare to be foolish, dare to be wise in your own way, dare to believe in what you believe. If you feel that you've begun to qualify yourself in certain areas, and everyone else says you are wrong and you are a fool, go ahead anyway, if you feel in your guts and your heart that this is a thing you want to pursue."

—Author Ray Bradbury, speaking to a Caltech YMCA Freshman Dinner Forum, on February 24, 1967.

"You will not be surprised to know that we have no ambitions to become another University of California—much as a big university system like that is needed in this booming state. But to fulfill some of our dreams we will need more faculty members and more graduate students. Possibly a few more undergraduates. Our total enrollment this fall is just under 1,500. It might—in 10 years—be 2,000. At that level we can expect to retain quality of the highest order—if we try hard enough. We know that smallness, in itself, may be no virtue. Plenty of small institutions are not good. Plenty of big ones aren't either. We have shown that pre-eminence can be achieved at about our present size."

—President Lee A. DuBridge, speaking on "Caltech—Past, Present, and Future," on October 10, 1966.

"In the twenties and thirties Caltech was a world leader in physics and chemistry. Caltech stood out not only because of its excellence, but because the background level of quality elsewhere was, on average, rather low. Since World War II, the quality of work in physics and chemistry has risen markedly in many universities, so Caltech is not quite as lonely as it once was in its position of eminence."

"The question arises: Are there new fields of research in which Caltech can enjoy, at least for a while, a relatively unique position of leadership, fields not already crowded by others, fields in which Caltech by virtue of its special scientific skills, facilities, and interests can make rapid, powerful strides? Is there a new field that offers Caltech today the opportunities offered by physics and chemistry in the twenties and thirties? The answer, I believe, is *yes*: behavioral biology."

"In making this statement, I must make it clear that I am speaking now as an enthralled individual, not as a trustee. The Board of Trustees has not discussed this matter. As a matter of fact, if and when it does, I feel sure that in its wisdom it will wisely toss it to the faculty. Decisions regarding the curriculum, fields of research, etc., are largely academic decisions. Largely, but not entirely. The faculty usually is perfectly willing to let the trustees decide for themselves how they will fund any proposed new program!"

—Arnold O. Beckman, Chairman of the Caltech Board of Trustees, speaking on "A Trustee Looks at Caltech," on November 14, 1966.

Come Home '02, '07, et al

Classes holding reunions in 1967 (those years ending in 7 or 2) have been invited by the Institute back to the campus on Tuesday afternoon, June 6—the day before the annual alumni dinner. Activities that afternoon will include a briefing on current Institute affairs, a tour of the campus (those who have been away from campus for more than a few years will be astounded), and a reception in the Athenaeum hosted by President DuBridge.

Coming Caltech Events

April 14, 8:30 p.m., Beckman Auditorium. Caltech Band concert.

April 18, 19, 25, 8:15 p.m., Dabney Lounge. Haynes Foundation Lectures. Charles Woodruff Yost speaking on: "Instability in International Relations," "Instability in Asia and Africa," and "International Organization as an Instrument of Stability." Free.

April 22, 8 a.m. to 5 p.m., campus. Annual Alumni Seminar.

April 24-26, campus. YMCA Leader of America, Abraham Kaplan. Free.

April 29, 8:15 p.m., Beckman Auditorium. Debate: "The Future of Man in the Twentieth Century." Arnold Toynbee and Allan Nevins.

April 30, 8:15 p.m., Dabney Lounge. Chamber music—Clarion Ensemble. Free.

May 5, 6, 8:15 p.m., Beckman Auditorium. Caltech Glee Club concert.

May 20, Beckman Auditorium. ASCIT Talent Show.

June 6, afternoon, campus. Reunion classes briefing, tour, and reception. Free.

June 7, dinner, Rodger Young Auditorium (Los Angeles). Alumni Association Annual Meeting.

June 9, afternoon, Beckman Mall. Commencement. Free.

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Biosystems? Solid State Physics? Applied Mathematics? It's All Engineering at Caltech

Frederick C. Lindvall, PhD '28, has guided Caltech's division of engineering and applied science through tremendous diversification since he became chairman in 1945. To some alumni this broadening has been gratifying, to others it has been aggravating, but to all too many it has been largely unknown. What is the state of engineering at Caltech now, and what is it likely to be in the future? Dr. Lindvall tries to bring former students up to date by answering some questions.

Q: Most alumni remember engineering as being far and away the largest of the six divisions at Caltech. Is this still the case?

A: The division, which is "engineering and applied science," is still larger than any other single division, but whereas about 60 percent of the undergraduates were enrolled in our division 10 years ago, now we get only about 35 percent of them.

Q: Why is that?

A: I would think it's a reflection of the increasing demand for scientists and the general public's misunderstanding of what is science and what is engineering. However, we may be losing some engineering prospects to other schools because of the high requirements in mathematics for admission to Caltech. Some good engineering prospects can do adequate engineering mathematics, but they aren't necessarily math whiz kids. Admission is based on an estimate of survival in the freshman year, which is heavily weighted in math and physics.

Q: Has graduate enrollment dropped off too?

A: No, not at all. We've had a gradual increase in our division—as have the other divisions—in graduate students. Right now we have about 100 MS candidates and about 200 PhD candidates. However, we expect graduate enrollment to level off in a few years because of the combination of a lack of qualified applicants and the expansion of graduate work in many other good engineering schools in recent years. We're interested in quality, not quantity.

Q: Don't you have any students working for a professional engineer's degree?

A: We still offer the Engineer degree, but not many people are enrolled in that

program. We grant about 10 Engineer degrees a year.

Q: What effect has the decline in undergraduate enrollment had on curriculum?

A: The most pronounced effect has been elimination of formal specializations in the course of study. All students are now in a single engineering option, although the program incorporates a very flexible plan to permit the student to follow his interest in a particular phase of engineering. But since about 75 percent of our students go on to graduate school, we consider that a major job is to prepare them for graduate training.

Q: Some engineering alumni, who remember when engineering seemed to be "electrical, mechanical, and civil," are surprised by the types of work that fall in the division today. What is that work?

A: Let me illustrate why those three classifications are no longer adequate for us; here are the categories of work now in progress:

Fluid mechanics—aeronautics, hydrodynamics, hydraulics, and water supply. There is, incidentally, a renewed emphasis on subsonic aeronautics, particularly with regard to STOL aircraft.

Solid mechanics.

Materials science.

Solid state physics. This isn't offered in the physics department here, but it is important to engineers.

Polymeric materials. This is an interdisciplinary field with physical chemistry and polymer chemistry.

Applied mathematics. This field is interdisciplinary with math and is now in its third year.

Environmental health engineering. This necessarily has strong inputs from chemistry and biology.

Engineering seismology.

Biosystems. This is interdisciplinary with biology. The computer is the key to these studies, which also embrace control systems and data handling.

Information science. This field is approached on the basis that information is empirical in nature. We are trying, using the computer as our laboratory, to develop better mathematics for handling large masses of data and disseminating information. We are also working on ways to use the computer to actually guide the course of on-line ex-



Frederick C. Lindvall

periments. Information science isn't yet a degree program, but it may be in the future.

Q: It almost sounds as if Caltech has a division of applied science, but it's not so obvious that the concept of engineering is in evidence. Has the old definition of an engineer—the man who brings men, material, and capital together to create new facilities—changed?

A: I don't think the definition is necessarily changing, but the underlying scientific base has expanded. Given today's technology, the creative engineer is more of a scientist than he was before. Moreover, it's very difficult to create a campus environment to fit that old definition, even when faculty have widespread industrial experience that they're trying to share with students. We have certainly not abandoned the concept of the engineer. Basically, we're attempting to give an education that doesn't suffer from technological obsolescence. The engineer is vital in the process of putting a system together as

well as designing components of it. We're particularly anxious to give our students some experience with design. But the old methods aren't applicable any more, so we're trying to find new ways of teaching our engineers how to design. This is a problem common to all engineering schools.

Q: With so many different kinds of research being done now, how does the division stand with regard to facilities?

A: We have ample space right now. In the last 10 years we've acquired Spalding, Keck, Karman, Firestone, Booth, and Steele laboratories. However, our projected growth pattern indicates need for another building in four or five years.

Q: Do you foresee faculty growth too?

A: We expect faculty to grow in proportion to the number of students. Our problem is to find the right people to conduct the kind of interdisciplinary studies that comprise engineering here.

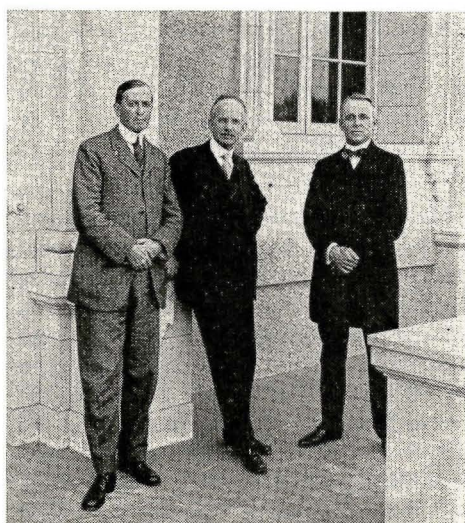
Institute Publications Available to Alumni

Engineering and Science magazine, published monthly, October through June, by the Caltech Alumni Association. Subscription given with yearly Association membership (\$5.00). Non-alumni subscriptions: \$4.50 domestic, \$5.50 foreign.

Research, brief descriptions of current studies in various fields at Caltech, published quarterly. Free, from Office of Alumni Relations.

Earthquake Research Affiliates, brochure describing a new program for support of research in causes and effects of earthquakes. Free, from Office for Earthquake Research Affiliates.

Personal Information Record, booklet for vital records concerning personal financial data (insurance policies, securities, property, bank accounts, taxes, etc.). Free, from Office of Income Trusts and Bequests.



Noyes, Hale, and Millikan, "three men of vision" who transformed a small engineering school into Caltech—one of nearly 150 pictures in *An Informal History of the California Institute of Technology*, a 52-page book of pictorial highlights of the Institute's 75 years. \$1.50 plus 25¢ for postage and handling, from the Caltech Bookstore.

Caltech Weekly Calendar, published weekly during the academic year. Free, from Office of Public Relations.

Proceedings of Caltech's 75th Anniversary Conference. In press.

New Books By Alumni

The Chemical Bond (abridged version of *The Nature of the Chemical Bond*), Linus Pauling, PhD '25. Cornell University Press, New York, 1967. \$3.95.

Principles of Color Technology, Fred W. Billmeyer, Jr., '41, and Max Saltzman. Interscience (Wiley), New York, 1966. \$11.95.

The Middle Ultraviolet: Its Science and Technology, A.E.S. Green, MS '41, Ed. Wiley, New York, 1966. \$15.75.

Introduction to Diophantine Approximations, Serge Lang, '46. Addison-Wesley, Reading, Mass., 1966. \$6.75.

Introduction to Transcendental Numbers, Serge Lang, '46. Addison-Wesley, Reading, Mass., 1966. \$7.50.

Ex-students Being Sought

Anyone who attended Caltech or one of its predecessor institutions (Throop University, Throop Polytechnic Institute, Throop College of Technology) for at least one year is an alumnus of Caltech and entitled to join the Alumni Association, as well as to receive *Caltech News*. Names and addresses of ex-students are being collected by Ted Combs, '27, Director of Alumni Relations, Building T-6, Caltech. He would welcome any information regarding them.

Kinematics, Howell Newbold Tyson, '50. Wiley, New York, 1966. \$10.95.

The Solar Wind, Robert J. Mackin, Jr., MS '51, PhD '53, and Marcia Neugebauer, Eds. Pergamon, New York, 1966. \$17.00.

Probability: A Survey of the Mathematical Theory, John Lamperti, PhD '57. Benjamin, New York, 1966. \$3.95, \$8.00.

Biological Chemistry, Henry R. Mahler and Eugene H. Cordes, '58. Harper & Row, New York, 1966. \$16.50.

'The Role of the Undergraduate Newspaper' Seven Students Chasing an Elusive Definition

A signed article in the January 12th issue of the undergraduate newspaper, the *California Tech*, on the use of drugs by Caltech students snapped the campus out of its midwinter lethargy for a few weeks. The excitement stirred up was not caused so much by the content of the article (which estimated the number of Caltech undergraduates that supposedly have used and are still using marijuana and LSD) as by the students' reaction to its publication in *their* newspaper.

The article was written by co-editor-in-chief Michael Meo, who had previously advised Institute officials of his intent to publish it. While most of them responded with a cagey, "If I were you, I wouldn't print it," they refused to interfere in the student-owned and -operated newspaper.

In the barrage of emotional argument following publication, an "anti-editor" faction argued that the writer had been irresponsible in subjecting the students to bad publicity and possible recriminations. A "pro-editor" group agreed with Meo that his actions were protected under freedom of the press. The writer defended his position by contending that what he wrote was true and was important enough to be exposed publicly.

On an official level Excomm, a standing investigative body appointed by the student government (ASCIT), disagreed, suggesting that the writer's motives were "sensationalistic." It recommended that off-campus distribution of that issue of the paper be prevented. But the ASCIT officers refused to support the Excomm's position, although they too chastised the editors with a pointed reminder of the responsibility expected of editors.

A group of students took the matter a step further. They secured 183 signatures on a petition to force a recall election of Mike Meo. The election itself, held eight days after publication (and only a few weeks before expiration of his normal term of office), was anti-climactic: only 184 votes were cast against the editor, with 318 supporting him.

The vote settled the immediate question of whether the editor was to be removed, but it did little to clarify the issue of who should have ultimate responsibility for newspaper content. A more definitive election a few weeks later changed the ASCIT By-laws to emphasize that the Board of Directors did have "ultimate responsibility for finances and circulation," but content apparently remains a matter of editorial judgment—at least until the next crisis.

After the dust had settled a bit and the editorial reins had been passed peacefully to two new men, some of the principals got together to see if the unsettled issues could be defined a little better. Portions of their discussion on "the role of the undergraduate newspaper" appear here.

Michael Meo, '68, California Tech co-editor, 1966-67: The *California Tech* has about 15 people on the staff. The *UCLA Daily Bruin*, according to its editor, has 60 people on its staff. They get out five papers a week with those 60 people. Maybe we ought to get out one paper a week that is somewhere near its quality—but we don't. We don't get out one paper a week that has long articles on how much the Negroes are discriminated against in Pasadena. On what Pasadena politics are like. On what California politics are about. On who is going to be, for example, the next president of the Institute. We never even mention that. We don't even have any

idea about how we can go about starting that type of story.

Fred Lamb, '67, ASCIT president, 1966-67: But as I understand it, people who are in charge of the paper over there essentially spend full time on that job.

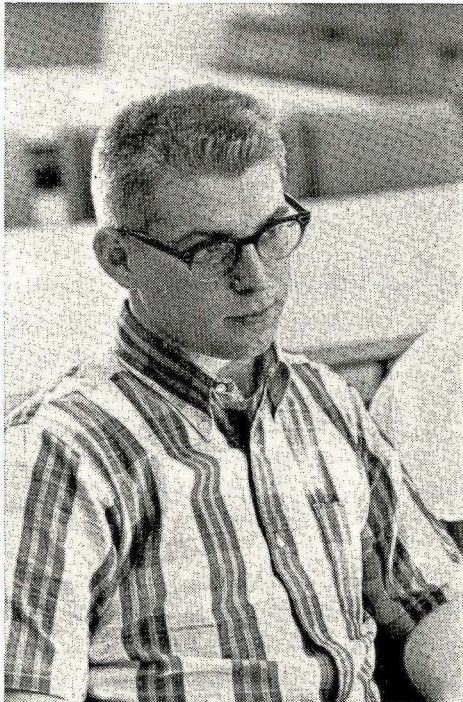
Meo: That's true. Still, our paper is worse than it should be. We have a highly intelligent, highly articulate student body. They can, if given the opportunity, express themselves pretty clearly. They understand ideas, and they aren't about to be roused out of their rooms and thrown into a Vietnam demonstration without asking themselves what it's all about. And with this intelligent group, we ought to have a better newspaper than we do. I think the reason that we don't is because of a conservatism on campus and a reluctance to grasp the type of newspaper that I think it ought to be. In my opinion, an undergraduate newspaper is formulated to arouse some controversy, to ferret out some things that aren't particularly wholesome. I think we ought to find things that aren't going right and set them right. We ought to be the Ralph Nader of Caltech.

Les Fishbone, '68, California Tech co-editor, 1967-68: First of all, you're wrong in saying that Caltech students are articulate. For the most part they don't give a damn about anything except getting A's in their courses. That is one reason why they don't say anything. Last night at dinner, when we had some people over from Westside Study Center [a community tutoring program in predominantly Negro northwest Pasadena], there were five people who kept with them for an hour, and the great majority of the house, when given the chance to talk about something that is current and important, walked away and didn't even bother listening. I think this shows the Caltech student body is not, as a whole, articulate.

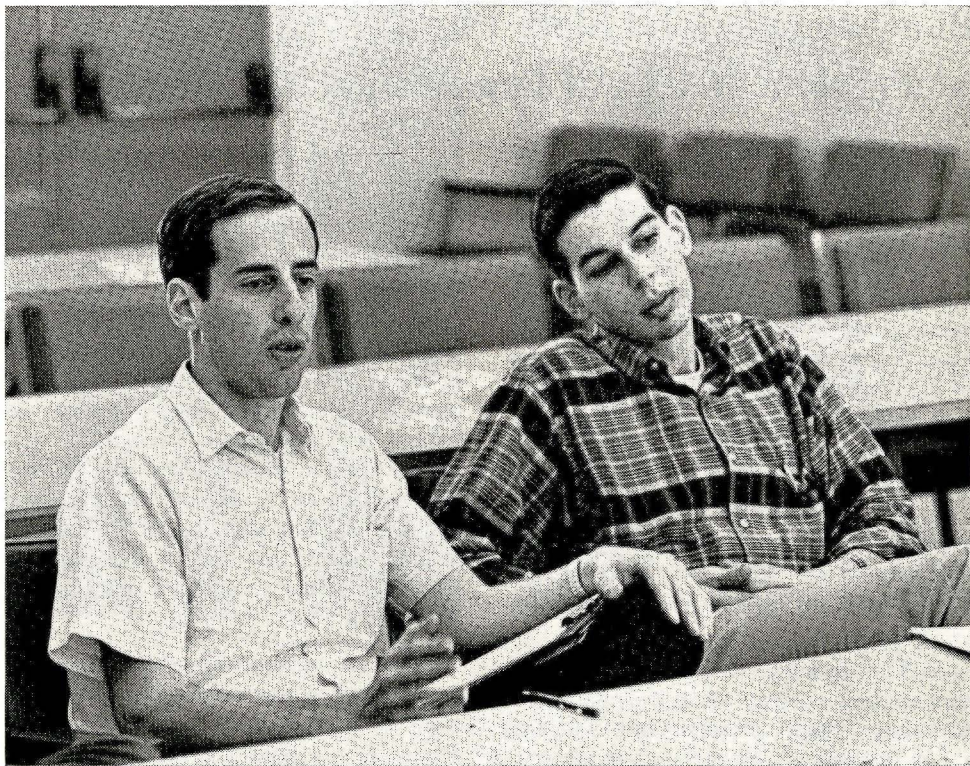
Meo: On the question of articulateness, they get A's on their English papers. They know how to use the language.

Fishbone: Do you think English papers are graded with any—

Meo: I think English papers are graded fantastically easily here.



Peters: Good papers, instead of concentrating on food in the houses, talk about things people have to face when they get away from college.



Lamb: Rather than stir up muck, why not look for things that are going wrong and can be corrected?

Lamb: But if they wanted to, I think students could be very articulate and intelligent on all current topics.

Meo: But what is the root of this conservatism on campus? What is the root of this not wanting to shake anything, not wanting to get under things?

Fishbone: When you get involved in something, it takes lots of time, and people don't want to give up their time from their precious studies.

John Middleditch, '68, California Tech co-editor, 1966-67: Well, I think it's also good to ask how the paper relates to this conservatism. Should the paper recognize it, or should it raise things to the surface and shake them up? I think the *California Tech* has done a much better job in this respect in the last few years. Our goal has been to make the paper a springboard to controversy and more like the paper that they had about 1957 or 1958.

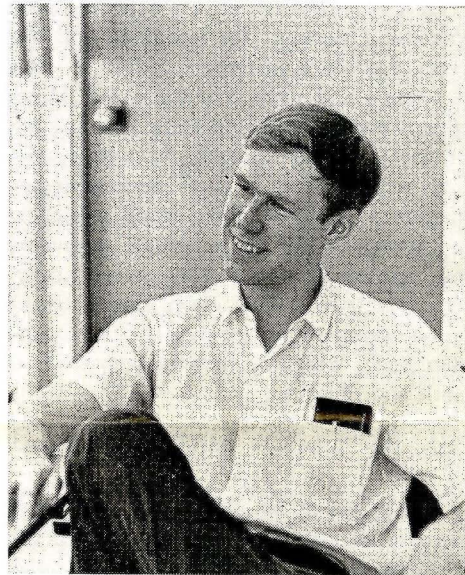
Lamb: I think one difference you ought to make here is between national issues and campus issues. I think the paper has an obligation to focus on the campus things, things that are important to students here and things that are happening locally, rather than focus on national issues. You can go and get a much more detailed, much more careful analysis in a lot of other places than by turning to the campus newspaper.

Arlin Peters, '67: But the places that have good papers are places that get away from just campus issues. Instead of concentrating on the food in the houses, they talk about things people have to face when they get away from college.

Meo: I disagree. I'm talking about strictly campus issues, and that is what the newspaper should cover. But my idea of campus issues includes national politics, because we're involved in that. Because the people demonstrating on the Vietnam Day Committee or people protesting the war in Vietnam are students. And on the campus at Caltech there are students who are also interested in that. I don't think we ought to send a reporter to follow Nixon around or to get the Associated Press service and run what it has to say on what's going on in China. We might have some opinion columns about this, but strictly campus is what we're covering.

But there's a difference between what a college newspaper covers and the campus issues that I think a newspaper ought to cover here. The campus issue that you

Fishbone: If there's an issue in the surrounding community that affects people of our age, I think it's relevant.



Middleditch: Our goal has been to make the paper a springboard to controversy, more like the paper that they had about 1957 or 1958.

get in a junior college, with people who are just there for two years, is: "Well, let's see what the administration has to say about this." And they go out and ask them, and the administration gives them something like: "It is our 75th anniversary this year, and we are going to have a big guy from England and from MIT and from Princeton and from Harvard." Okay, so they get that news story, and they just diddle the news release that they get, and say: "Isn't that marvelous!"

That isn't what I mean by a campus issue. A campus issue is going out and talking about Pasadena. That's campus. That's of interest to the students here.

Middleditch: Or polling the faculty on how they feel, for example, about the space program; maybe it's a boondoggle to 90 percent of them. Or asking the students and faculty if they feel we should overturn the teaching system.

Fishbone: I disagree that a newspaper should concentrate on campus issues. If there's an issue in the surrounding community that affects people of our age or will affect us as we go out into the world, I think it's relevant. If someone thinks Caltech students are dead because they don't talk about issues, well, one way to get them to talk about issues is to put issues in the paper bringing them to light. And I think it's the duty of the paper to do this.

Middleditch: The policy has been that any student who wanted to write a letter and got it to us early would almost certainly get it printed. Any student who wanted to write an article and wasn't springboarding his own personal opinions or blowing the horn of a certain minority or specialized group would be able to write an article.

Fishbone: You're digging yourself into a hole by saying "minority group," because that's the only way minority groups get to be majority groups.

Meo: If somebody came to us and said, "I want to do an article on the wind tunnel," I'd say, "Great, do an article on wind tunnels." But if somebody wanted to do an article on guns or why the National Rifle Association ought to be abolished, then I would say, "Please write a letter, not an article."

Lamb: I'd like to bring up whether it's possible to stir up student interest and excitement by taking a look at some places where things are going wrong, where they ought to be corrected, rather than just stirring up muck. For example, the use of Beckman Auditorium was a case where the newspaper went to bat for the students and ended up getting the use fees waived for student use. It seemed that they were able to get the students pretty well stirred up in a purely constructive way. You mentioned that you felt that the main job of the newspaper was to go around with a spade and dig up all the muck it could.

Meo: No, burrow with a spade and dig up the things that should be corrected.

Lamb: Okay, now I'll go along with that.

Meo: Like marijuana.

Lamb: Well, it certainly didn't seem from the article that you felt that marijuana was an evil to be corrected.

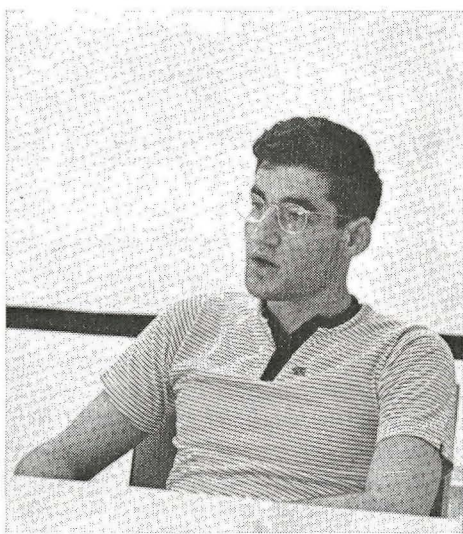
Meo: It's a topic which should be talked about. It is an evil—it was something shoved under the rug. It is an evil that the Institute has no policy yet on what they do with marijuana smokers.

Fishbone: It's not an evil if they don't have a policy. I think it's good that they don't have a policy.

Meo: But the official policy is that they kick them out of school and turn them over to the law or something.

Fishbone: Well, that's only because they are required to by the State—

Meo: It's not that they are required to. I've been meeting with other newspaper editors, where the official policy is that



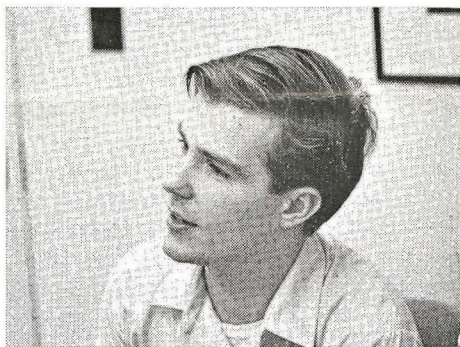
Meo: We ought to find things that aren't going right and set them right. We ought to be the Ralph Nader of Caltech.

they will very quietly tell them to move off campus and leave the school.

Lamb: Wasn't that the policy that was brought to the attention of all on-campus students last spring by the Master of Student Houses?

Meo: No. This is a policy that was not brought to the attention of all the on-campus students.

Lamb: Well, it was announced by the house presidents in the houses that the Master of Student Houses said that if you insist on smoking marijuana, you're going to have to move off campus. It was made

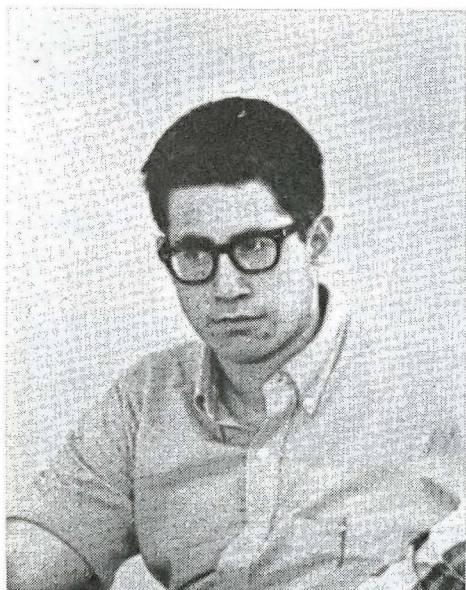


Hendrickson: The paper should stir things up, but a reasonable amount of discretion is also a healthy thing.

absolutely clear to the house presidents. I know in my house, at least, the house president was quite clear in making the announcement.

Dave Lewin, '70, California Tech staff: Another thing, since Caltech is somewhat of an isolated campus—unless you have a car—I think that the student newspaper should have some columns that might contribute to keeping the student body in contact with cultural life in general and in what's going on in the world of the arts. This is just as important as the news.

Tim Hendrickson, '67, California Tech co-editor, 1965-66; Excomm chairman, 1966-67: I think the paper should stir things up, but a reasonable amount of discretion in this regard is also a healthy thing. Given the situation of a fairly homogeneous and apathetic student body at Caltech, a student newspaper can contribute a lot to (1) focussing attention on things that people might otherwise forget about and not have the initiative to check into, such as events around the school; (2) making known that there are doors around the school to be opened if a person chooses to do so; and (3) serving as a forum for campus politics and such.



Lewin: The student newspaper should have some columns to keep the students in contact with cultural life in general.

Caltech-Scripps Conference: The Big Science-Type Guys Take Off Their Masks For a Whole Weekend

Fifty-two Caltech undergraduates and forty students from Scripps College for Women spent a recent weekend in the San Bernardino Mountains in what one student described as "a well-run mixture of planned and spontaneous activities."

This is the eleventh year for such Caltech-Scripps Conferences, sponsored by the campus YMCA. Originally, the format consisted of a principal speaker and resulting discussion groups. This type of conference ended two years ago when a large proportion of participants felt that there were too many esoteric and rambling discussions on illusory topics.

Responding to student dissatisfaction, Caltech psychology professor John Weir suggested that the Caltech and Scripps students might like to experience a sensitivity training weekend.

This worked into a successful break-away from the old discussion group format and has since burgeoned into several continuing sensitivity groups on the campus.

Feeling that these campus offshoots now hold a firm place in undergraduate student life, this year's conference chairman, Dan Metlay, '67, set out to devise a new type of weekend. He wanted to create an environment in which the students could react freely to a variety of stimuli, both audio and visual. He also hoped to eliminate situations that would allow the men and women "to keep on their masks and play games."

"In the past," Metlay says, "there's been quite a bit of the Caltech fellows impressing the girls with what big science-types they are, and the Scripps girls handing it right back from the humanities."

Friday evening started with a reading of Eugene Ionesco's play *The Chairs*. The reading was cut short just before the denouement, and the students were asked to discuss the play and probable endings, and then to group themselves with those whose ideas of an ending were similar. This resulted in ten groups, each of which was asked to present its own version of an ending the next morning. All ten groups presented endings that were basically the same as the author's.

Clark Awards

Continued from page 1

medals, all of them, for valorous service while under fire, just for attending Caltech. But we would like the Administration either to better delineate the requirements for these D. S. Clark awards or to choose more qualified recipients for the \$250 prize . . . It worries us to see an ambiguous prize awarded to nice guys for no special reason. Could you please elucidate us, Dr. Clark?"

Sid Gally, president of the Alumni Association, a bit bewildered by the editors' response to what was offered by the Alumni Association to the undergraduates as a gesture of friendship and good will, tried to set the record straight in a letter to the newspaper. He pointed out that neither Dr. Clark nor the Alumni Association was involved in the choice of recipients and added that a committee of faculty and administration, headed by the chairman of the division of engineering and applied science, made the awards.

The editors replied that the requirements for the award were nebulous nevertheless, making the award "a \$250 prize for being in the engineering option."

Sid Gally, sadder but wiser after trying to make his point in another man's newspaper, declined to pick up the gauntlet a second time, undoubtedly taking comfort in the knowledge that at least the winners were grateful.

Saturday night brought a wide range of visual images. Metlay, using slides and music designed to evoke a broad spectrum of emotion, presented a montage of the human condition. After seeing the slides the students were free to follow the moods the slides brought forth. Most of them worked with crayons, paints, and clay to materialize emotions derived from the slides.

Peter Balint, '67, one of Metlay's committee, ran a group of foreign film shorts dealing with abstractions of color, form, and music, and the evening ended with a spontaneous outburst of dancing.

Sunday morning evolved into a group experiment with readings of Haiku types of poetry, and the conference ended with another spontaneous grouping: a long serious discussion, with the exchange of ideas centering mostly around communication between people. The students freely discussed their own lacks and fears of communication. The conference ended with the generally expressed feeling that the weekend had resulted in considerable mutual understanding between the Caltech and Scripps students.

Biologist Bonner Stalks Freshman Physicists

Readers of last December's *Engineering and Science* magazine may have noticed that Paul Saltman, '49, PhD '53, claimed to have been "intellectually seduced" in his senior year at Caltech by James Bonner, PhD '34, professor of biology. As a result of that encounter 18 years ago, Saltman was snatched from the jaws of business school and became a biochemist; subsequently he taught at USC for 14 years and in July of this year becomes provost of Revelle College of the University of California at San Diego.

Meanwhile, Dr. Bonner is still proselytizing, and he was recently caught in *flagrante delicto* at a YMCA Freshman Dinner Forum. His pitch was as follows:

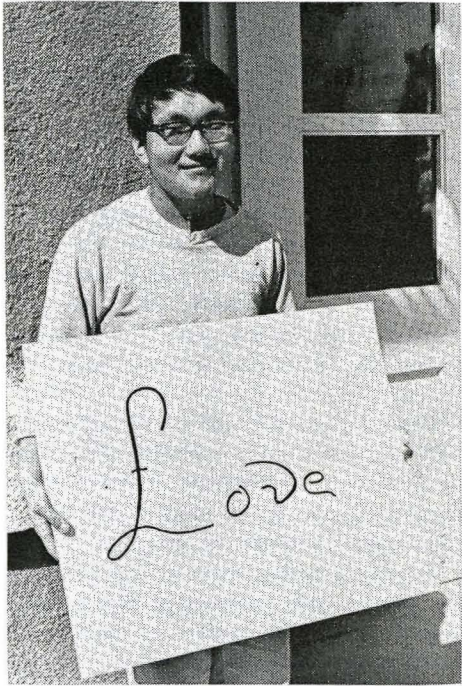
"It's a ritual for those entering Caltech to state that they want to become physicists or mathematicians. An interesting aspect of the physicist is that sooner or later he turns to biology.

"For example, on the Caltech faculty Professor Derek Fender, one of the leaders in our breaking the brain code and professor of information science and biology, was originally a physicist who turned to psychophysics and then to neurobiology.

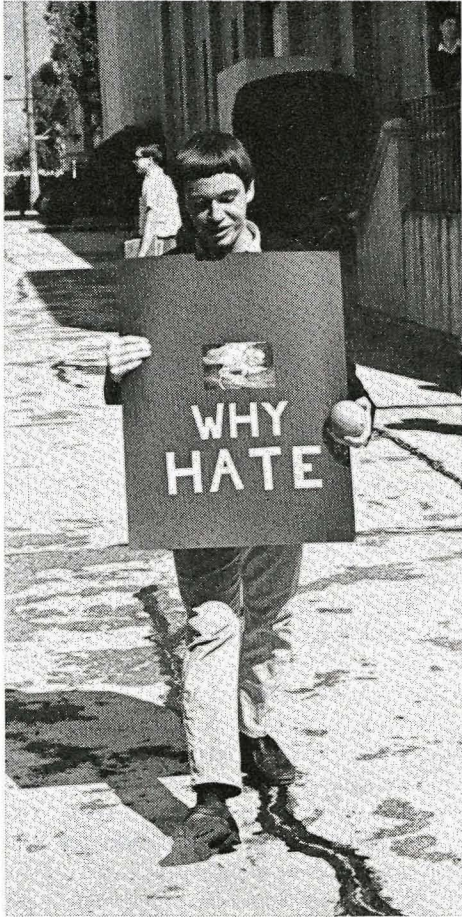
"Professor Max Delbruck, who has been responsible for the rise of modern molecular biology, was a theoretical physicist who worked in Copenhagen with Niels Bohr. But then he decided he was bored, and he came to Caltech to start learning to be a biologist.

"Caltech's Professor Seymour Benzer, who has been responsible in large measure for our understanding of the genetic code, was a physicist at Purdue University. Now he is studying neurobiology and working on the brain code by studying the 'total intellectual life of the *Drosophila*.' He says, and I quote, 'It's a good intermediately complicated creature. It has 10^5 neurons, about halfway between man and zero on a log scale.'

"And, of course, at the Institute we see people switching from physics to biology after one year, after two years, after four years, and when they start graduate work . . . So, those of you who are avowed physicists take heed of my warning. It'll happen sooner or later, so why not bow gracefully? Give in now and you'll be ahead."



STUDENT PICKETS (above, right) and counter-pickets marched at the back of Throop Hall when recruiters from Dow Chemical were on campus March 6th. About two dozen participated in all. The seriousness of the counterpickets was not too well established, which is probably just as well.



Photos by Glenn Engebretsen, '67



How Long Since You and YOUR Seven-Year-Old Son Earned \$2,000 a Day? Portrait of Alumnus Steve Nathanson -- California Bullduster

Who says a Caltech education cripples a man for a practical life, burdening him with theoretical knowledge that forever elevates his mind above the mundane? Take a Caltech BS in civil engineering, add to it a similar MS from Oregon State, saturate with a passion for ocean breezes, move it all up north of the Arctic Circle for a year or so, and presto—you have Steve Nathanson, '56, Alaskan fisherman and 1967 frontiersman.

When he left Caltech 11 years ago, he had some notion that he would like to go into pipeline construction, but that was before an Oregon State research project somewhere north of Nome introduced him to Alaska. When the job was over, he moved south to the Anchorage-Seward region, thought of those pipelines running across endless deserts, looked at the lush land around him, and decided to plant his roots in the sometimes frozen North.

A decade later he and his wife, Karen, and their three children have a 22-ton fishing and charter boat; a homemade home, warehouse, and dock; and icicles (in season). They live at Halibut Cove near Homer, on the Kenai Peninsula. The family's principal occupations are: pilot boat service, salmon, and king crab. Their hobbies include skiff building, coal hauling, house building, and Alaska-style storytelling. ("An Alaskan mosquito landed at Umiat, was fueled with 2,000 gallons of aviation gas, and flew off before the error was discovered.")

They rarely get to play golf or tennis, to surf, or to go to baseball games. They are probably not quite up to date on "Batman" or "Peyton Place." On the other hand, Steve Nathanson never complains of being unable to keep up with technical literature, is not worried about losing his research grant, feels no pressure to publish, does not wait breathlessly for the latest company organization chart, and does not spend two and a half hours a day watching someone's taillights.

His anxieties tend to be a little more physically motivated, such as having seven tons of deck ice build up on his boat during one two-hour charter haul, and

making pickups and deliveries in whole gales or worse.

But business seems to be good. He says that he "had a fine year crabbing, earning \$200 a day until they moulted. Bobby [his seven-year-old son] fished salmon with me last summer, spending the entire five weeks out in the inlet and handling the boat, at all times working the gear. It was my most exciting salmon season to date, my son as deckhand, and the fish hitting so heavy that the gear would sink in 10 to 20 minutes. Our good days were \$1,000-2,000. Also had some commercial charters for a company looking for quarry sites on the peninsula. Crabbing prospects look poor for 1967. One company has left the area, and another gone bust. Guess I'll spend the time sprucing up the warehouse."

Bobby and his younger brother Tommy take correspondence lessons from a teacher in Juneau. Little sister Patty is not old enough yet. The proud father says that "the elder is a couple of years or more ahead, thanks to our construction project. And after the last salmon season, he has to use scientific notation ($\times 10^n$) to record his bank account!"

The construction project, a 24- by 32-foot, two-story, combination house and warehouse, was finally finished last winter, enabling them to move from their 12- by 30-foot quarters. He had been burning 8 tons of coal a year to keep that 360-square-foot structure warm. He built the new home using his own version of staggered wall studs and double insulation and expects to get along on less coal now, even though the new building is much larger. "This," he says, "is to cut down on my coal mining and hauling so I can more fully retire."

Steve is one of the "California Bulldusters," as opposed to native Alaskans, which his children are. He expects to bring the family down to the "smaller" United States next fall for a long-awaited grand tour. Maybe they'll even pass through Texas, swap a few stories with the natives, and—with no regret at all—look over some of those pipelines.

PLACEMENT ASSISTANCE TO CALTECH ALUMNI

The Caltech Placement Service may be of assistance to you in one of the following ways:

- (1) Help you when you become unemployed or need to change employment.
- (2) Inform you of possible opportunities from time to time.

This service is provided to alumni by the Institute. A fee or charge is not involved.

If you wish to avail yourself of this service, fill in and mail the following form:

To: Caltech Placement Service
California Institute of Technology
Pasadena, California 91109

Please send me: (Check one)

- ☐ An application for placement assistance
- ☐ A form indicating a desire to keep watch of opportunities although I am not contemplating a change.

Name

Degree (s) Year (s)

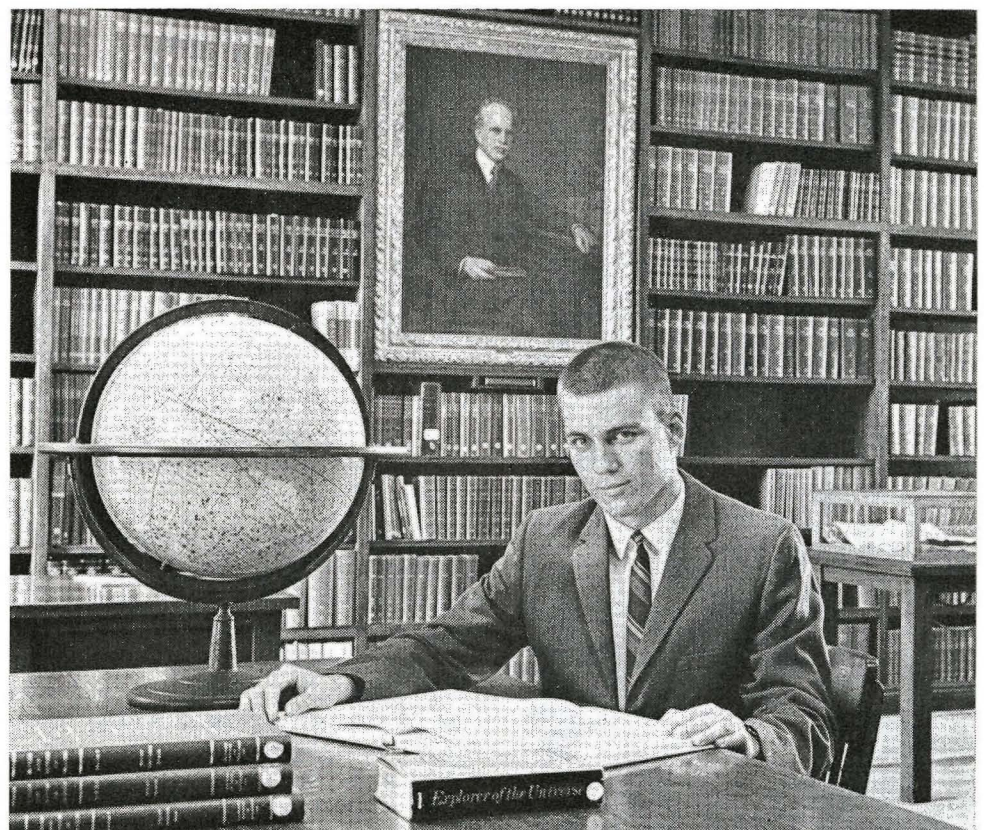
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48 Years of SF Alumni Turn Out For DuBridge Dinner

More than 200 alumni and wives, from as far away as Sacramento, turned out for a dinner talk by President DuBridge at San Francisco's Fisherman's Wharf on March 4. Dr. DuBridge spoke of the emerging new campus and the role of Caltech in the scientific community, then deflated alumni egos by telling how bright the students are *now*.

Harry Sigworth, '44, who reported on the meeting, noted that class representation was quite broad, ranging from class of '18 to class of '66. He attributed a bulge in the early forties to possible "emancipation from the baby sitter or short-lived affluence just before the second kid hits college." Neal Huntley, '54, San Francisco chapter president, presided at the affair. The next meeting of the chapter will be a dinner-dance at the Presidio of San Francisco on May 20.

Caltech's 75th Anniversary Conference will be shown on educational television stations in various parts of the country during 1967. Watch your local listings.



RICHARD THORNBERRY, '70, is the great grandson of two men who guided Caltech through the transition years of 1908 to 1920: astronomer George Ellery Hale and Throop president James A. B. Scherer. Richard, the grandson of Margaret Hale and Paul Scherer, slipped into Caltech unannounced. His credentials were revealed later by Hale's widow, Mrs. Evelina Hale, who lives in Pasadena.

Study Group

Continued from page 1

and features about the Institute, faculty, students, and alumni.

- Alumni continue to be interested in what other alumni are doing. "Personals" in *Engineering and Science* serve this interest, but in-depth information on outstanding alumni is also wanted.

- Many alumni, particularly those outside of southern California, complain that the only time they hear from Caltech is when their money is needed, and the only things they learn about Caltech are what they read in the newspapers. Whenever possible, news should be presented to alumni before or concurrent with general release so that they can get firsthand reports.

- A published forum of alumni opinion should be encouraged.

- Alumni should be advised of what Caltech publications are available to them.

- Alumni should be brought up to date and kept informed about how the Association functions.

- Although Caltech has an enviable number of alumni as Association members (about 50 percent), ways should be found to encourage more graduates, particularly holders of advanced degrees, to become members.

- Chapter activities should be expanded, perhaps with regional seminars featuring Caltech faculty.

- The Association should find a way to present an alumni viewpoint to the Institute on matters of mutual interest.

- Discussion should be begun to see if the Institute could augment Association finances.

- The Association Board of Directors should have a member who is assigned the job of studying alumni-Institute relations on a long-term basis.

- The terms of the directors (currently two years) should be extended to at least three years.

- The Institute should take advantage of the talents of alumni, by such means as bringing them to campus to discuss their specialties with faculty and students and by using them to help solicit funds.

- Consideration should be given by the Caltech Board of Trustees to having a representative of the Association sit with them.

- In view of the increased work connected with an expanded alumni program, a paid executive secretary/business manager should be hired to take care of routine office duties and meeting arrangements of the Alumni Office and otherwise support the Alumni Association and its Board of Directors.

- Another Alumni Study Group should be appointed in about five years to evaluate progress and consider new recommendations.

Caltech's Lester Lees -- Probing Outside of the Educational Mainstream

Aeronautics professor Lester Lees is a man with both feet firmly planted: one in space, the other in northwest Pasadena.

Lees supervises Caltech's hypersonic research program, but he is also deeply involved in trying to pull young minority-group earthlings into the country's educational mainstream. He is doing this through tutorial projects in Pasadena's predominantly Negro area.

At Caltech there are 16 graduate students working for their PhD's under his guidance, although Lees himself has never had time to get one. He is probably the only member of the President's Science Advisory Board without one. But as the old saying among aeronautics people goes:

1 Lees = 10 PhD's

Lees has been immersed in things aeronautical since his graduation from MIT in 1940. After obtaining an MS there the next year, he was allowed one deep breath before being snapped up by the Air Force as an aeronautical engineer at Wright Field, Dayton, Ohio. From 1942 to 1944 he was a research fellow in aeronautics and an instructor in mathematics at Caltech; he then joined the National Advisory Committee for Aeronautics at Langley Field, Virginia. From there he was asked to go to Princeton as an assistant professor of aeronautical engineering and was made associate professor in 1948. In addition to his teaching, he was in charge of supersonic and hypersonic theoretical and experimental research for the Air Force and the Navy.

He was invited to Caltech in 1953 where he was co-principal aeronautical investigator with Clark Millikan until the latter's death last year. Now, he is collaborating with Toshi Kubota, associate professor of aeronautics, and is assisted by Miklos Sajben, assistant professor of aeronautics, and Wilhelm Behrens, a research fellow.

The main interests of the Lees research group are problems of high-speed flight, including hypersonics, physics of gases, combustion, kinetic theory, gas dynamics, and space technology.

What is currently concerning them are problems allied with the wake of a body moving at high speeds. By means of hypersonic wind tunnels and considerable theoretical work, they are experimenting with different shaped bodies and are studying the recirculating flow just behind the blunt rear end. The flow aft of this region may become turbulent and thereby cool the hot wake that is developed at high speeds.

They want to know exactly what the process is and how fast the cooling takes place, because the cooling rate determines "observables" such as luminosity and radar return produced by the wake's electrons.

Lees says they are also searching for the effect on the flow field of the thin frictional layer near the surface of a moving body since, in some cases, this layer determines the entire pressure field.

Of special fascination to him is a project Leverett Davis, Caltech professor of theoretical physics, tossed his way: an investigation of the wake of the earth in the solar wind. Lees believes that discoveries in this area will eventually shed light on the whole mystery of "weather" in the upper atmosphere.

This year Lees is giving a new course, *Topics in High Temperature Gas Dynamics*, which deals basically with what happens to bodies moving rapidly through the atmosphere. It has started out as a one-semester but will probably become a one-year course.



Lester Lees

He is chairman of the Jet Propulsion Laboratory-Caltech administrative committee, a liaison group dedicated to facilitating mutual scientific interests. In addition, he is in demand as consultant to various companies involved in space technology.

As well known as he is in the space field, he is no better known to space scientists than he is to many young Negro students in Pasadena. Lester Lees was born and brought up in a melting pot community and school situation in New York City, and he has always been close to the special problems of minority groups. In recent years he has become increasingly concerned over the way he feels young people, especially in these groups, are being pushed further out of the country's educational pattern. He is convinced that American public education is not doing what it could or should to prepare non-college-directed students for productive places in society.

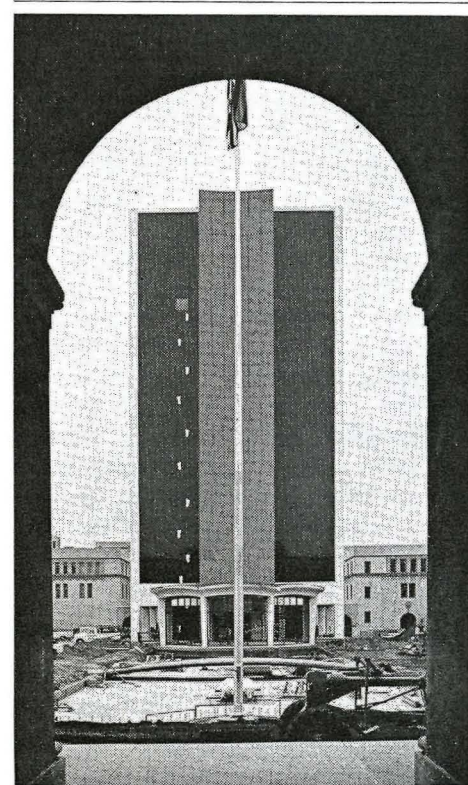
Always one to tackle a problem by jumping into the middle of it, he has involved himself in his own "back yard" of Pasadena. In the fall of 1965 he discovered the Westside Study Center, a struggling tutorial project in Pasadena's predominantly Negro northwestern section. Since then he has given constantly of his time, interest, and talent.

He has also become an important part of the planning and execution of a new tutoring plan at one of the Pasadena junior high schools, and he is a member of a Negro-white educational study group, which he calls "a probing operation."

His mind churns with ideas for the improvement of education on a realistic basis for these minority young people. For most of them, college is out of the question, but in some of them he finds bright minds just waiting for a spark of motivation by someone who understands their special

stumbling blocks. As Lees piles up hours of one-to-one contact with all kinds of students, he learns more about all the underlying problems.

Just what one Lester Lees can do against the apathy and lack of understanding of hundreds of his fellow citizens is debatable. Many of the young people who have felt the warmth of Lees' interest and dedication will be able to define their goals more clearly. And although Lees never got around to that PhD, it is possible that at least one of the youngsters he has tutored will get one.

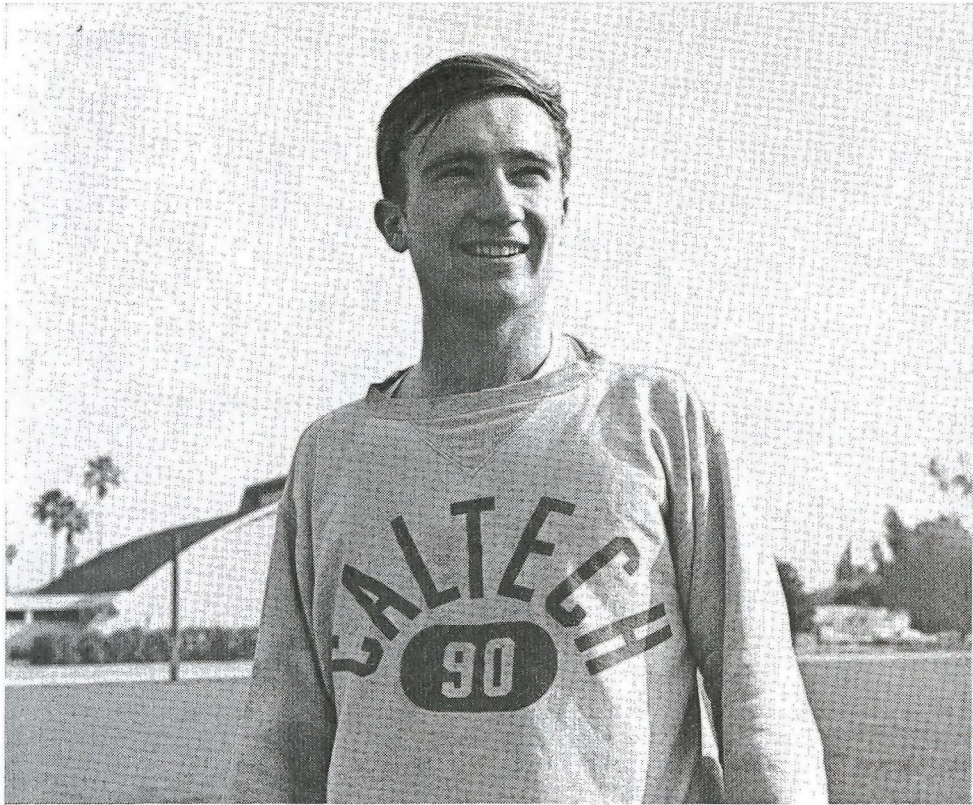


MISSING: ONE HUMAN FLY with size 56 feet. Last known whereabouts: three-quarters up the east face of Millikan Library on March 27.

Alumni Association membership brings:

- *Engineering and Science* magazine
- Triennial Alumni Directory
- Athenaeum membership privilege

Details will be mailed to all alumni in May.



Pete Cross, '67

A Sadistic Campus Sends Pete Cross Off to The Boston Marathon -- 26 Miles on April 19

While taking a "photography break" after running seven seemingly effortless miles around the Caltech track, Pete Cross, '67, observed that "the human body isn't made to run great distances." From a biologist who runs 80 miles every week, that should be an authoritative statement, but Pete will be disregarding his own implied advice on April 19 when he runs more than 26 miles from Hopkinton to downtown Boston in the annual Boston Marathon.

Pete holds the Caltech records for the one- and two-mile runs (4:22 and 9:41.5), and finished 17th in the Culver City Marathon last December 19 in a creditable 2 hours, 45 minutes, and 21 seconds. As a result of that race (his first and only try at marathon distance), the *California Tech* editors urged in an editorial that Pete be sent to Boston to compete; they figured that his Culver City time would have been good enough to place about 40th in the 1966 Boston Marathon.

The athletic department couldn't authorize funds for a trip to Boston, but enthusiastic fans on campus raised \$151 towards the \$200 needed, and the development division chipped in \$49.

Basketballer Terry Bruns Wins 3 Honorable Mentions

Terry Bruns, '68, a 6-foot-5 center on Caltech's basketball team, was an honorable mention on three regional all-star teams this year. He was named to the all-Southern California Intercollegiate Athletic Conference team, the all-NAIA District III squad, and the UPI All-Pacific Coast team, which was headed by UCLA's Lew Alcindor. Bruns averaged 18 points and 11 rebounds a game. He scored 26 points in two games, one of them a 117-55 victory over Pacific Christian College. The 117 points set a team scoring record for Caltech; the previous high was a 112-62 win over La Verne in 1954.

Duel Meets Now Official

Fencing has been added to Caltech's intercollegiate athletic program after a two-year probationary period established that there was continuing student interest. Fencing, coached at Caltech by Delmar Calvert, is the 12th sport to gain such status.

Pete, who is from the Cape Cod community of East Sandwich, Massachusetts, has a pretty good idea of what's in store for him. He points out that "the course is pretty straight and level for the first 17 miles, but then there are hills for 4 miles, and the last hill is the worst of them. I'm told that a lot of people don't even have the strength left to run the remaining downhill part into Boston."

Alumni who are currently growing old in various laboratories around Cambridge or wearing out slide rules and trouser seats for electronics companies in the suburbs should take the opportunity to get outside and fill up their lungs with fresh spring air; and then use it to cheer Pete through those last miles.

Henry DeWitt Brings Home 2 National Championships From NAIA Swim Meet

On the weekend of March 16-18 Caltech swimmers entered national competition for the first time and brought home two firsts, a second, and an assortment of meet, league, and school records.

At the National Association of Intercollegiate Athletics (NAIA) championships at Buffalo, N.Y., Henry DeWitt, '68, won the 50- and 100-yard freestyle events in meet record times of 21.88 and 48.57 seconds. The times were also better than DeWitt's own Caltech and SCIAC records of 22.3 and 49.6 seconds, set in 1966. DeWitt finished second in the 200-yard freestyle, setting another new Caltech record of 1:52.4. (The old mark was 1:55.8, set in 1963 by Bruce Chesebro, '63.) The NAIA championships drew 1,000 competitors from 50 small colleges and universities throughout the nation.

At the same time that DeWitt was winning in Buffalo, two other Caltech swimmers were competing in the small-college National Collegiate Athletic Association (NCAA) championships in the City of Commerce. Greg Wright, '69, placed tenth in the 200-yard backstroke with a new Caltech record of 2:10.5, and also set a new Caltech record of 59.6 seconds for the 100-yard backstroke. In the same meet Chris Reed, '70, set a new Caltech freshman record of 1:02.6 in the 100-yard butterfly.



Student fund-raising campaign for the coffee house: soft-sell (above), hard-sell below).

Coffee House Finally Becomes a Reality

Continued from page 1

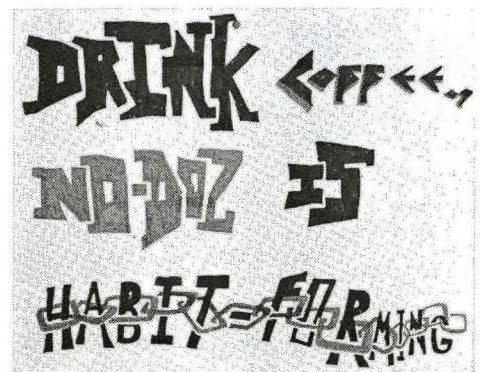
spools, which they have transformed into tables.

The spot has long been referred to on campus as Prufrock House—a name it will continue to carry in its new role as a social center. It is not known who named it, but popular theory is that it must have been a harried graduate student resident who, like T. S. Eliot's J. Alfred Prufrock, was contemplating the emptiness of his life.

Joe Rhodes has stressed that Prufrock House, in its new role, fills a long-felt need. Many Caltech students are without cars, and there is no place either on or within walking distance of campus where they can gather in the evening to enjoy a cup of coffee, something to eat, conversation, and music, all in one bag.

Rhodes also said that Prufrock House is prepared to welcome the entire Caltech community: undergraduate and graduate students, faculty, and administrative staff. Alumni, also, are urged to visit Prufrock House, which is scheduled to open in early April.

Students will operate the coffee house, working three-hour shifts; present plans



call for it to be open from 8 p.m. to 2 a.m. It will be run on a self-service honor system basis, with sandwiches, pastries, ice cream, and beverages for sale.

Although the coffee house is primarily a student-run affair, the Institute will retain ownership of the house. It will be available to the students until such time as the property is required for campus expansion. The Institute has assured the students that if interest and participation warrant continuation of the coffee house at that time, efforts will be made to relocate it.



TWO ALUMNI COUPLES compare what they taste with what the expert tastes as part of the Third Annual Alumni Wine Tasting, March 4 in the Athenaeum. 225 attended.