

Today
is

THE CALIFORNIA TECH

Add
Day

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Twelve Pages



Outgoing President Harold Brown taking his last look at the Caltech campus Photo—Al Kellner

Orthokeratology: A New Cure For Vision Problems?

by Henry Fuhrmann

For thousands of people, the relatively new science of orthokeratology (ortho-k) has been a welcome alternative to glasses and contact lenses. The process consists of the fitting of a series of specially-ground hard contact lenses, which progressively flattens (or steepens) the cornea of the eye to its normal shape. This treatment for distorted vision has sparked heated debate among optometrists and ophthalmologists regarding its safety and possible long-term effects.

The Problem

An estimated 130 million Americans suffer from some form of faulty vision. With normal vision the outer surface of the eye, the cornea, receives light from an object, and bends the rays as they pass through. The lens then further bends these rays so that they focus at a point on the retina at the back of the eye. The cells of the retina, thus excited by the light, transmit impulses to the brain.

Myopia (nearsightedness) results when the light is brought to focus at a point in front of the retina. When the light reaches the retina, it produces a blurred circle instead of a point; the distortion of images in this way hampers vision.

Hyperopia (farsightedness) occurs when light rays converge to a point behind the retina. Again, the image on the retina is a

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Trustees Meet to Begin Action on New President

by Gregg Brown

Action has already begun toward picking the new president for Caltech. The trustees met on Monday of this week to initiate action on the six to eighteen month procedure of picking Caltech's next president.

The trustees set up a search committee consisting of Board Members R. Stanton Avery, John G. Braun, Shirley M. Hufstader, Simon Ramo, Lew R. Wasserman, and Thomas J. Watson. With the exception of Watson, who lives in Greenwich, Connecticut, all of the appointed trustees are local residents.

The trustees also authorized Chairman of the Faculty Board R.E. Vogt to form a faculty advisory committee to the trustees who will do the initial scan and selection of candidates.

Student input to the process of selecting the president will occur somewhat farther down the line than this committee, probably after the field of candidates has been narrowed considerably.

During the Faculty Board meeting held later in the day Dr. Ray Owen emphasized the importance of student input to the selection procedure, to which

Vogt replied that he had already met with student leaders to discuss the matter.

Only rumors exist at this point about the potential candidates, but a high ranking administrative source stated that he believes that, although on campus candidates will be considered, he predicts the next president will be selected from candidates not connected with the Institute.

Robert F. Christie has been named interim president of the Institute until the new president has been selected.

Schaefer Leaves Registrars For Post In Chemistry

by Kevin Drum

William Schaefer, Caltech's current Director of Financial Aid and campus registrar, resigned those posts to accept a permanent full time teaching post in the Chemistry department. He is now a Senior Research Fellow in Chemistry.

The new Director of Financial Aid will be Ursula Hyman-Kelly, now Assistant Director of Financial Aid. Lyman Bonner will take over the post of Acting Registrar.

Dean of Students Ray Owen commented that, "I'm sorry to see Bill go, but he'll still be around." He expressed his faith in Bonner, saying he was glad that Bonner was taking over. Bonner is presently Director of Student Relations. It is not known who will take over his position.

These changes in upper level Institute positions come on the heels of two previous resignations (see last week's article "Morgan Replaces Wales As New Associate Dean"). This has given rise to yet

more speculation that Caltech is going to ruin. Once more we report that these rumors have absolutely no basis.

Schaefer graduated from Stanford University in 1952 and received his Master's degree from UCLA in 1954. He also got his Ph.D. from UCLA in 1960. He was an instructor here until 1962 when he was promoted to Assistant Professor. In 1968 he became a Senior Research Fellow, the post he holds now.

Y Fund Drive Starts

The Caltech Y's annual student fund drive starts this Monday with a free keg of beer going to the house which makes the largest contribution. Representatives in each house will be coming around with a letter and pledge card for each student. Your contributions help us continue our Noon Concerts, Noon Discussions, Philharmonic and theatre trips, Ski trips, speakers, etc.

Udall Speaks On Carter's Rise During Y Discussion

by Gregg Brown

Congressman Morris "Mo" Udall was on campus this last Monday to talk about the political scene in general and his opinions on the ecology, national defence and the recent political campaigns. Brought to the campus through the actions of the Caltech Y, Udall spoke at two in the afternoon in Winnett lounge and during a well

produced discussion with Jess Marlow in Beckman Auditorium at eight o'clock that evening.

Reflecting on the campaign, Udall expressed his bewilderment at Carter's meteoric rise from having three percent of the electorate with Udall in the others column of the national polls, to winning the presidential election against Ford. Udall

Continued on Page Three

The Week In Review

by Kevin Drum

Jimmy Carter was sworn in yesterday as 39th President of the United States. Carter called for increased unity in the hard time ahead and promised that he would not misplace the trust that the American people have put in him.

The Los Angeles Superior Court announced that it would consider three different proposals for integration of the LA school district. These developments made it likely that integration of the schools would not take place without a bitter struggle.

India's Prime Minister Indira Gandhi said that parliamentary elections would start again in India in March. "Let us go to the polls with the resolve to reaffirm the power of the people..." said Mrs. Gandhi.

Theodore Sorenson, President Carter's choice to head the CIA, decided not to seek confirmation to that post. Sorenson had been

subject to increasing criticism lately that he was not experienced enough for the job.

Convicted killer Gary Gilmore was executed by a firing squad Monday just hours after an order blocking the action was dissolved by a Denver court.

Anais Nin, a novelist and an important figure in the women's rights movement, died Friday at the age of 73.

Claudine Longet was convicted of misdemeanor negligent homicide in the shooting death of skier Vladimir (Spider) Sabich. She will probably be sentenced to a short term in jail.

Anthony Eden a Nazi resistor in 1938 and a man who won praise for his criticism of the Suez Canal debacle in 1956, died Friday at the age of 79.

Actor Peter Finch died Friday

after collapsing in the lobby of the Beverly Hills Hotel. Spokesmen for the UCLA Medical Center attributed his death to a heart attack.

Governor Jerry Brown unveiled a 1.2 billion dollar school reform plan this week. The program would take place over the next five years and would serve to reform the present school financing system as ordered by the courts.

As result of the current drought, farmers in Central California will probably have to cut crop production by up to 40%. This would have disastrous economic consequences for California's 8 billion dollar a year agriculture industry.

Former President Jerry Ford warned against letting the Soviet Union gain the upper hand in military superiority in his State of the Union message. His address was generally very well received. It was Ford's third.

Inside The Tech

Read the candidates' statements in the California Tech Election Supplement. Page 6

Harold Brown's farewell party in pictures and prose. Page 4

How large should Caltech's undergraduate class be? Page 2

Parry! Riposte!

The Editorial Page

Undergrads-How Many?

At Monday's faculty board meeting, a report was presented concerning the problems of student body growth. Over an eleven-year period which began with the opening of the new houses, the undergraduate student body has grown 27 percent. In any normal college, this change would indeed be very large as there would be an increase of over 1000 students. Here, only a change of 180 students has occurred. To an outsider, such a small change would seem to mean little. Yet we would have identical problems coping with our 180 students as some other college would have coping with 1000 students.

The problem that is most evident is the degradation of student life. Although the Institute would like to think that the academic environment at Tech is unique, this is not the case. An academic education of the same quality can be obtained from any of the other top colleges. What actually makes Caltech unique is the social system—a social system which unfortunately is in an exceedingly delicate balance. This social system revolves around two parts of undergraduate life: the student houses and the faculty student relations. This is what makes Tech unique, this is what makes the entire place work. As is evident to everyone in the Caltech community, the powers-that-be wish to increase our size even more than the extra 180 students that we have gained since 1966. The current plans involve increasing the undergraduate student body to 1000 people, which constitutes an increase of 45 percent. Imagine Harvard's population of 4000 suddenly swelling to 6000 over a period of fifteen years.

Many excuses have been used to rationalize this growth. We have been told that it is normal for a college to expand at this rate. The people who handle the money point out to us that this would increase the Institute's revenue in the general fund by \$4000 per student; the increase would result in \$400,000 more being brought into the Institute. The Admissions Committee says it is our responsibility, nay it is our God-given duty to society, to train "intelligent, energetic young people who can blaze the way to solve important problems..."

The considerations can be easily dismissed. The \$400,000 that students would bring to the Institute is not a valid reason to increase the student body. The administration seems to ignore that it costs the Institute around \$10,000 per year to educate a student, while this student only brings the Institute \$4,000. Thus, the Institute receives only \$400,000 at the expense of \$1 million.

Increasing the number of students would indeed degrade life here. The situation in the student houses is already a major problem. Right now, there are more students than can be accommodated by the houses; three hundred people are living off-campus this year. Next year, assuming 225 frosh, 60 to 70 of them will be denied on-campus housing.

The student houses provide a family—a family of advisors and friends. The houses are an experience in study habits, in honesty, and in cooperation. If people do not belong to a house, and do not work with and as part of the house, they lose out on a major part of Caltech. They might as well go somewhere else for the academia.

The student body is increasing at a rate disproportionate to the increase in the faculty. By the time we, as a student body, reach 1000 strong, there will be a sufficient increase in the student/faculty ratio that one-to-one communication between students and faculty will be severely impaired.

Some faculty member was heard to say, "Since I've been here, the quality of student life and the contact the students have with the faculty have been shot to hell. It used to be that the campus was one big family; everyone knew everyone else. That isn't the case now. It's because we're too large and getting larger..."

In a typically bureaucratic action, the Faculty Board decided to postpone a decision on the issue until later, by which time it could be too late.

—Al Kellner
Henry Fuhrmann

Letters to the Editor

To the Editors of the *Tech*, and members of the ASCIT BOD

Gentlemen:

The primary purpose of the Coffeehouse is relaxation; it provides a respite from academic or other pressures. Therefore its atmosphere and purpose are all important.

It is not to provide magazines such as *Time* and *U.S. News & World Report*; the fifth floor of Millikan does that quite nicely.

It is not just to provide food. A person could go to Winchell's, B.C., or any other of Pasadena's snack shops for that.

It is not to provide music; one could stay in his/her room and hear music; it's hard to avoid in the student dorms.

I don't mind if you do provide the above features, of course; it adds to the atmosphere.

But I cannot go anywhere else for comic books. My personal resources are too meager to buy them, and newsstand owners take a dim view of people reading comics without buying them.

No, I go to the Coffeehouse primarily for the comics, and there are many who agree with me. Doubtless they'll be writing their own letters.

I would recommend subscriptions to the more popular magazines: Spiderman, Thor, Fantastic Four, Defenders, Iron Fist, Superman, and the Legion of Super-Heroes, to name my own personal favorites.

On such a trivial matter as comic books could the ASCIT elections depend.

—Bruce Miller
44 Dabney

The Monday night BOD meeting produced the following:

The coffee house managers are trying an experiment to increase socializing at the coffee house. If you agree or disagree with the goal and/or the methods used to obtain it, go *talk* to the managers. As always, BOD members want to get your opinions, but talk to the managers *too*.

—Ed Bielecki
ASCIT President

To the Editor
The California Tech:

Recently in this column, a letter from Carl J Lydick reported that the bobbin case was missing from the sewing machine available to students in the south complex game room.

We checked last week and it had not yet been found, so we purchased a new one and have placed it in the machine. If anyone does find it, please return it to the machine as a spare.

We are pleased that students find this sewing machine helpful, if not for the slings and arrows of academic life, at least for the rips and tears!

Sincerely,
Caltech Service League
Dorothy Dean
Corresponding Secretary

Editor, the *Tech*:

This letter is in response to many inquiries I have received concerning the anonymity of student responses to the TQFR questionnaires.

The basic question concerns the identifying number that appeared on the cover letters and questionnaires that were mailed two weeks ago. The original intent of the survey was that no identifying marks should appear on the questionnaires (other than the course number and instructor name). However, while the computer program for this project was being written (a job, I might add that was well done by Budak Barkan, a senior here) it developed that this could not be done. By the very nature of the Registrar's computer system, it was necessary to print the cover letters separately from the questionnaires. Thus in order to match the questionnaires to the correct cover letter, it was necessary to identify them.

That is, the apparent lack of anonymity of the survey was due to idiosyncrasies of a computing system.

Certain additional facts are germane. First no record was made of student names and numbers when the letters were printed. Moreover, the Registrar's records are frequently updated—this is done at least as often as

any student leaves or enters Tech—and any changes would cause our computer program to assign different identifying numbers to students. So it would probably be impossible now to use the computer to learn the name of the student who turned in a questionnaire solely from its 'identifying' number. Finally, it is the policy of the Educational Policies Committee never to show the actual questionnaires to non-staff members, including faculty.

I urge any students concerned that their responses might be identified to blot out the serial numbers on their questionnaires.

Finally, I would like to thank the Registrar for access to his records, Lyman Bonner for the funds to foster this expensive project, and the students for their cooperation with this survey.

—Bert Wells

Holiday now a Holiday

The Institute has declared Washington's Birthday (Monday February 21) as an official campus holiday for faculty and staff. Enjoy the three-day weekend!

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the Sundance Kid*

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their guests; \$1.00—anyone else

NEXT WEEK

The Longest Yard

J'ai bu du Cafe Noir

by Sandy McCorquodale

Everyday at 5:30 in the afternoon, at least according to abfahrt schedules, the Yugoslavian Express leaves Munchen and heads for Athens via Salzburg, Zagreb, Beograd, and Thessalonika, finally arriving about two days later. Christmas holidays found me riding a train from Stuttgart to Munchen, putting into the banhof at 5:29 and running berserk looking for berth 14 and the Express (while pausing to read a schedule to find out it was berth 14) hefting 20 kilos of suitcase around to beat the crowd from my path. Boarding the train just before it left 15 minutes late, I was first assaulted by the odors of sausage and beer. It seems that nobody makes the journey in any sort of sober mood and the train company certainly doesn't argue with the profit it makes on selling *pivo*, beer in more languages than beer is.

I found a seat in a compartment with two Greeks, one Serb, and two Albanians, both of whom (a good attack of American passport paranoia here) I could have sworn kept eyeing the pocket containing all my identification papers, visas and cash, the umbilical cords of foreigners in Europe. Claspng my hands over my pocket in seeming prayer but actually a feeble imitation of the old Brink's armored car handshake, I waited to see what would happen next. Conversation of course, was uppermost in the minds of my compartment mates and they started in with German.

"Ich sprechen nicht Deutsche, nix Deutsche, nein Deutsche..." I blithered on until they more than had the idea. Next came Serbo-Croatian and I knew how to sit there and say "Ne, Ne." Then, I was addressed in Greek. Wow, all those years of Homeric Greek in high school, boy I can really lay it on them; just about to open my mouth when it hit me I'd be as comprehensible as a man on a Greyhound bus asking

directions in Beowolfish terms. Sat there and grinned a lot while they ran on with a conversation which somehow turned to American politics and they flashed a question at me.

"Ford, gut?"
 "Ford? Nein gut. Carter gut." It seems to have been the right thing to say as they all laughed and offered me a beer while explaining: "Ford nein gut fur Greek. Turkey, Crete (shaking his head) and NATO." Whereupon he delivered a universally understood handgesture and everybody cheered. Well, I thought, I can play at this game too. A hand gesture for attention.

"Carter nein gut für Jugoslavia. Russkies eingang, uh enkunft? (Real pidgin pidgin here.) Carter sprechen 'Nein Amerikan truppen fur Jugoslavja.'" Quite a bit of confusion while they argue about just what the hell I was trying to say and then a spokesman after they've hashed it out says, "Russky... (he crushed the can in his hand rather violently)...Jugosawy!" This was enough politics for everybody as they went back to discussing other matters and I tried to fall asleep without removing my eyes from my pocket of valuables.

By now the train was going up and down the hills into Austria, the empty beer bottles in the corridor rolling to one end of the car as we went uphill and clattering to the other end as we started down. A fellow who was apparently a friend of the Serbian stuck his head in as we approached the Austrian border. Austria maintains a huge book, roughly the size of the Los Angeles phone book, and checks every passport against it. This fellow was on the Austrian shit list and needed to be smuggled across the border. He offered everybody 100 Deutschmarks apiece to let him hide under the seats and have nobody say anything to the passport controllers. Fortunately, the two Greeks

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Congressman Morris Udall during Y discussion.

Photo—Kent Daniel

UDALL IN Y DISCUSSION

Continued from Page One
 admires Carter, but cannot help feeling that Jimmy Carter's enchantment of the press and their enthusiastic, if somewhat incredulous, support won Carter more of the election than he deserved on issues alone. Incredulous because, as Udall put it, Carter broke most of the rules of national presidential campaigns. An unknown and a southerner, and someone who the public felt relatively unfamiliar with before the campaign, Carter's chances as a candidate were thought to be slim before his gathering momentum in the primaries.

Udall feels that Carter's desire to please everyone, which he thinks is genuine and not simply a factor of the campaign, will cause Carter problems as he assumes office—as have the promises that Carter has already been forced to compromise upon careful examination of the budget and economic considerations.

About Ford, Udall said that he feels Ford is a decent man, but one who is behind the times with his economic theory. He stated that he felt that Ford was a product of the thirties and forties—a period that believed that inexpendable resources and economic growth was possible and that indefinitely increased profits to suppliers like the oil

companies would result in unlimited supplies of oil.

Udall, who is expected to be appointed to the prestigious position of Chairman of the House Committee on the Interior sometime this week, feels that the Carter administration—with Schlesinger as head of the new energy department—is ready to maintain the state of urgency he feels the American people need to do something positive about energy conservation. Udall blames Richard Nixon for using the easing of the gasoline shortage after the summer of 1973 as a ploy to avoid Watergate charges, thereby making the American people believe that there was indeed no shortage.

Udall is worried that Schlesinger is too much in favor of nuclear power, but Udall said that when he spoke to him, Schlesinger said that he feels that the times have changed and that he has changed with them on the matter of nuclear energy. Udall favors the development of many small energy sources—solar, wind, and other small scale projects, and has co-sponsored a bill to allocate two billion dollars to small non-nuclear research in support of this opinion.

Udall expressed the opinion that the Defense budget could be cut and made more efficient. He feels that the Russian escalation

is not against us but against the Chinese border, and that reactionary escalation is foolish. He also feels that we are misplacing our technological expertise in arms by basing our warfare on huge combersome weapons like the B-1 bomber, which can now be efficiently disabled by small, relatively cheap weapons such as the SAM missiles.

Udall is an expert on the operation of the Congress and in a unique position to comment on its workings. Among other things, he stated that he feels that a Congressman's job is to lead, to take guidance from his electorate but not to be shackled to the polls. He also feels that the scientific knowledge of the average Senator or Congressman is less than it should be, and that many are unaware of the scientific advice and information that is available to them.

On one final note: Udall said that although Harold Brown's nomination caused cross-currents on the floor about Brown's hawkish or dovish nature, most Congressmen feel that Brown is an extremely competent man and is very capable for the post of Secretary of Defense. About Brown's support of bombing Vietnam, Udall said that "By-gones are by-gones," and it won't be held against his confirmation.

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ATTENTION ATTENTION ATTENTION ATTENTION ATTENTION

"You'd have a BBQ anyway..."

Harold Brown Leaves Caltech

by Kevin Drum

The *Tech* was wrong. Harold Brown's farewell party was not a pizza party and it was not in the Quad. However, it was Sunday afternoon, as announced. As it turned out, it took place in the Fleming-Ricketts courtyard and featured french dip sandwiches and (of course) brownies. John Gustafson, the originator of the "Harold Brown for Secretary of Defense" RF (see Dec. 10 issue of the *Tech*) posed for several photographers. At about 4:30, Brown himself showed up. He said a few words to the crowd of students, mainly that it was hard for him to leave Caltech. He said that he thought that Caltech students were "unique in the world in every way," and that Techers were, by and large, friendlier than students anywhere else and more reasonable.

IHC Chairman Ed Rea then presented Brown with the Olive Walk Brick award—a plaque signed by the seven House presidents with a genuine Olive Walk brick on it. ASCIT President Ed Bielecki presented him with a memorial photograph of the RF already mentioned. Brown's wife, Colleen then said that it would also be hard for

her to move and that she had enjoyed her stay here. Brown then autographed an 8X10 foot poster of him, noticing for the first time the peanuts on the glasses. He got a letter from a child in the crowd asking what young people could do to help the national defense. He promised a reply.

Brown was then led into the courtyard for the high point of his life. A piñata in the shape of a B-1 bomber was lowered and he was invited to break it. A mighty heave with a baseball bat did the job, spewing peanuts all over. "That should not be taken as an expression of any opinion," he said in reference to his stand that the B-1 bomber question was still under consideration.

Finally he left for the faculty farewell party, the last time we would see him here. He expressed the wish to see Techers there, though commenting that he had already met one. So we're now left without a president. We may have to wait for over two years for a new one (the selection process which finally picked Brown took two and a half years). In any case, Harold Brown's spirit will probably be with us for many years to come.

Photo by

Gregg Brown

Al Kellner

Dave Wheeler



"Bomb 'em all, but save the oil!"



Jim Mayer prays for the arrival of the new secretary



Ray Owen

ASCIT President Bielecki and IHC Chairman Rea pose with their gifts for Brown (left)

Heaven Defend Us

words by J. Kent Clark

God protects the working girl and hopeless fools and drunks
Fish and Game protects coyotes, tarantulas, and skunks
Mama Bears save baby bears and mama mares save foals
IRS saves millionaires, but who'll protect us trolls

Heaven defend us, heaven defend us
Heaven help this college of technology
Heaven defend us, heaven defend us
Heaven defend us now

It's simply inconceivable for Brown to take Defense
Completely reprehensible, a capital offense
It shows a moral cowardice we'd rather not discuss
He'd sooner face the Comissars than fool around with us

Heaven defend us. . . .

Harold has the Army and the Navy in his hands
Fifty thousand bureaucrats will leap to his commands
We will have the janitors and several guys named Bob
We'll be sunk without a trace if God goes off the job

Heaven defend us. . . .

Brown will have the Air Force and the missles and the MIRV's
To whistle down aggression or conduct a war of nerves
Polarises patrol the seas while SAC patrols the sky
NATO guards its subsidies while we sit down and cry

Heaven defend us. . . .

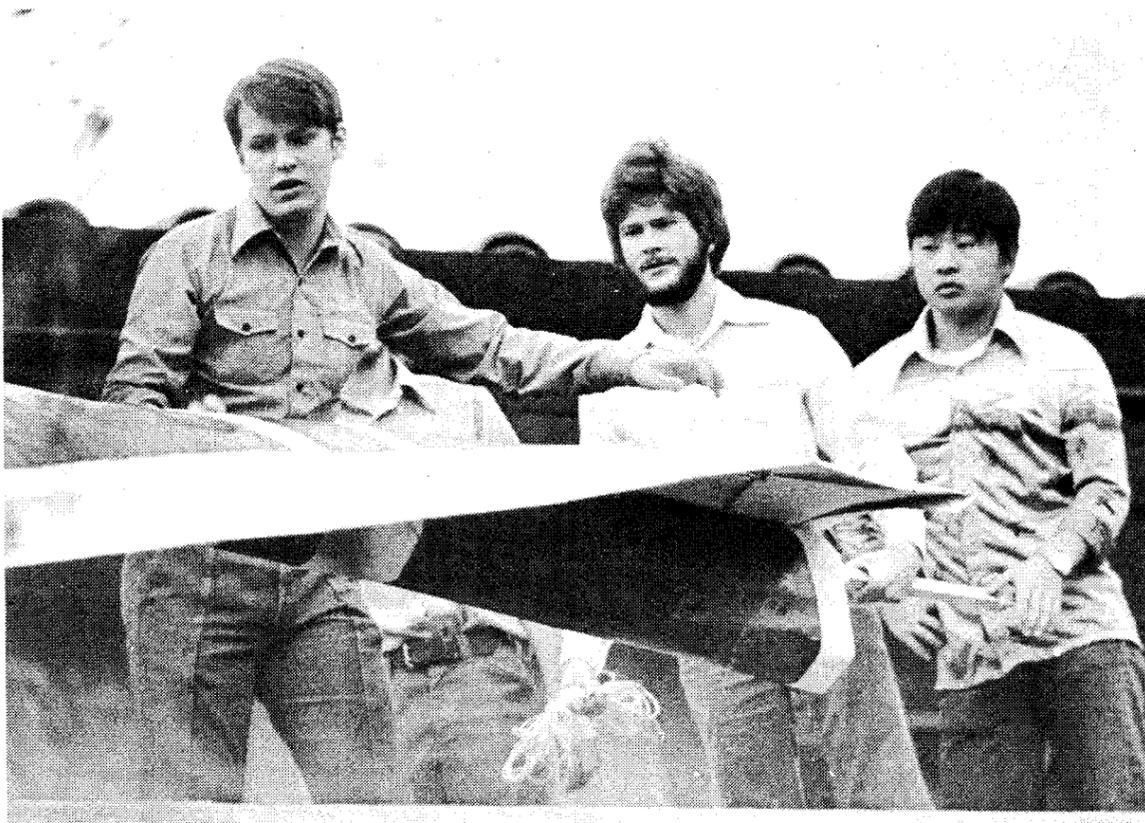
Junkies run away from fuzz and sinners flee the church
Harold runs away from us and leaves us in the lurch
Why can't he stay around awhile, then gracefully retire
When we've found a president no government would hire

Heaven defend us. . . .

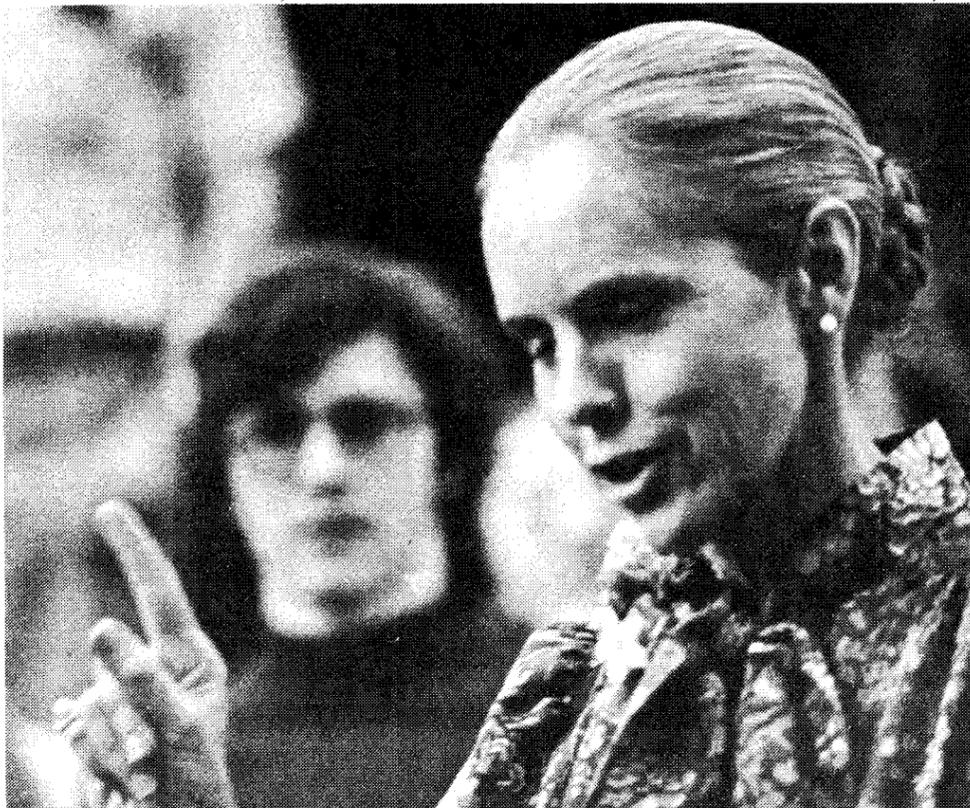
Sinking ships desert their rats and men desert their wives
Wives desert their squalling brats and bees desert their hives
Harold Brown bugs out on us, he splits and leaves the scene
Worst of all the heartless clod will take along Colene

Heaven defend us. . . . (repeat)

Obbligato
Oh saints preserve us, our defenders make us nervous
Heaven keep this kooky Institute from grief and misery
Oh miserere, devil take the military
Blessed saints save C.I.T., save C.I.T.



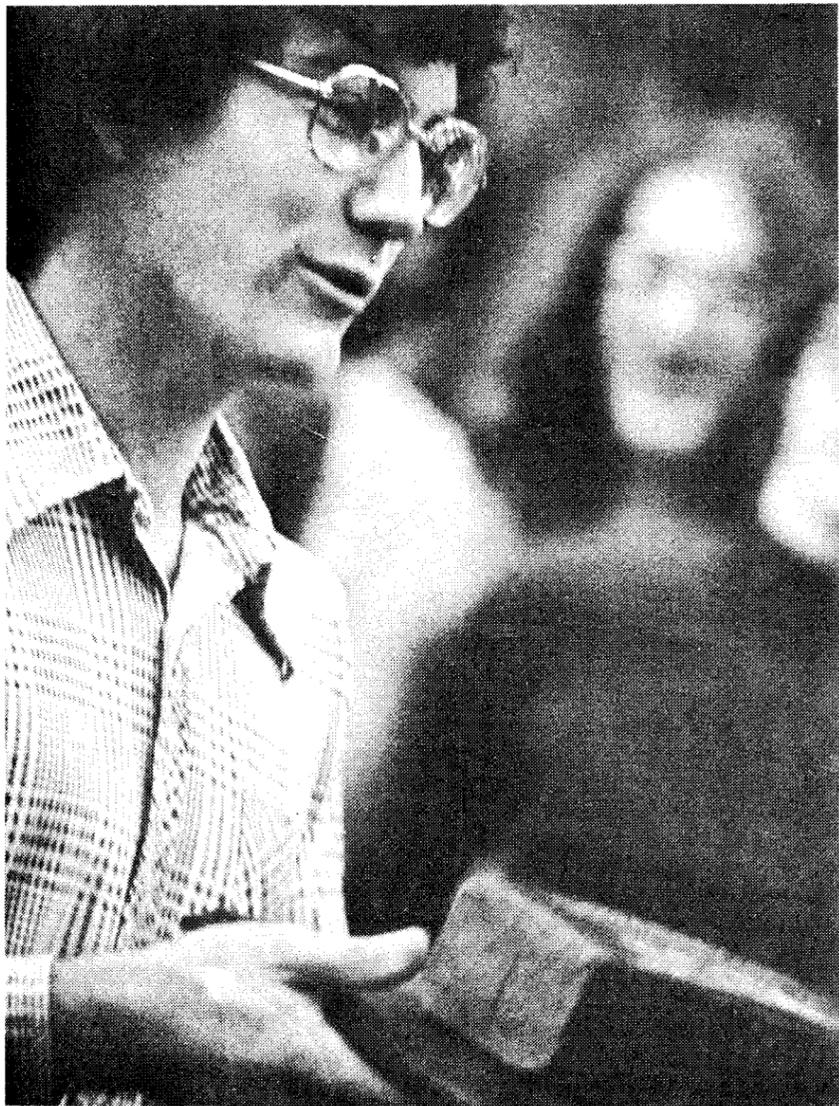
Rudds unfold their masterpiece



Colleen Brown reflects upon her Tech experiences



Harold Brown thought the whole event was a giggle



The presentation of the Olive Walk Gold-Brick

THE CALIFORNIA TECH Election Section

Page Six

Friday, January 21, 1977

The *Tech* is running the campaign statements of all those running for ASCIT offices. These statements have been limited to 250 words, and are being printed without any editorial changes.

What Do They Do?

by Stan Cohn

ASCIT elections are now close at hand, and the student body will soon choose its officers. Although the statements of candidates appear in this issue, it is important for a concerned voter to also know the duties of each of the offices, as well as the candidates' feelings about them.

The official duties of ASCIT President are to be the official representative of ASCIT to the outside world, and to be chairman of the BOD and a member of the Excomm.

Because these duties are so general, what a president of ASCIT accomplishes is largely reflective of the amount of determination and drive he has. The current ASCIT President is Ed Bielecki of Dabney.

The Vice President has not only the responsibility of the duties of the President in the President's absence, but has a primary responsibility of maintaining the Honor System among the students. This office is now held by Kevin Gromley of Fleming.

The responsibilities of the ASCIT Secretary lie mainly in keeping records of all minutes and correspondence that occurs with the BOD. Tom McDonnell of Dabney is the current Secretary.

The Treasurer is responsible for all the money matters of ASCIT. This includes all bank accounts and contracts that ASCIT holds. The treasurer must also maintain all the financial books of ASCIT and be responsible for an annual audit of ASCIT's accounts. Robert Chess of Dabney now holds this office.

The IHC Chairman is the

official liaison between the Interhouse Committee of house presidents and ASCIT, and is likewise responsible for all contacts between ASCIT and house organizations. Ed Rea of Page is presiding in this office.

The Director for Academic Affairs is responsible for all ASCIT committees dealing with academic matters of students. He represents the corporation on faculty committees dealing with such academic matters. This office is held by Bert Wells of Ruddock.

The Director for Social Activities is responsible for any ASCIT social programs, and for coordinating these activities with the undergrad houses. Ken Rousseau of Fleming is currently in this office.

The Directors-at-Large perform all the general duties of BOD members along with conducting the Red Cross Blood Drive and Charities Drive. They also keep a calendar of events of interest to ASCIT members. The present Directors-at-Large are Leroy Fisher from Ruddock and Jim Westover from Fleming.

The sole duty of the Activities Chairman is to arrange the ASCIT movie program. This year's movie manager has been Randy Okubo of Page.

The Athletic Manager is also a member of the IHC and is responsible for keeping Interhouse and Discobulus standings along with being in charge of all sports awards. The Athletic Manager is currently Debbie Wilson.

For more information consult the *little t*. But most importantly, remember that this is your campus and your student body, so vote!

Vice-President

DUTIES OF THE VICE PRESIDENT. The Vice President shall, during absences of the President, assume the duties of that office. He shall be a member of the Board of Directors. He shall act as chairman, without vote, of the Board of Control. He shall assist the President in coordinating the policies and activities of the Associated Students. His primary responsibility shall be to insure the continuance of the Honor System as a vital force among the students.

Sexton

Hi friends. My name is Chris Sexton and I'm running for the office of ASCIT Vice President. For those of you who don't know, the ASCIT V.P. is the Chairman of the Board of Control. His duties are to investigate all cases brought to the BOC before they are presented to the members of the Board at a formal meeting.

My reasons for running are two-fold. First, I feel I am qualified for the job. You see, for the past year I have been Secretary of the BOC. In that capacity, I have helped the Chairman in his investigations. Consequently I have some experience in the investigative duties of the Chairman.

The second reason for running is that I *do* want to be Chairman of the BOC. I see it as a challenge which I am eager to accept. Also, I feel that I could do a good job if elected. You see, I have a lot of ideas for improving the BOC which I would like to try and implement. Let me give you a sample of what I had in mind.

Everyone knows how secretive we on the Board are about our work. For the most part I agree with this secrecy, but I feel we should do some things out in public so that folks will know we're still here. Consequently, I propose that we institute penal-

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ASCIT President

DUTIES OF THE PRESIDENT. The President shall be the official representative of the corporation, and he shall preside at its meetings. He shall be chairman of the Board of Directors and a member of the Executive Committee. He shall have ultimate responsibility for the proper observance of all responsibilities delegated to members of the Board of Directors, the Executive Committee, or any committee thereof.

Bielecki

Over the past year, I have come to appreciate how much running around being ASCIT President entails. The most important aspect of the job is the gathering, acting on, and distributing of information.

To do this well requires the ASCIT President to develop and maintain many contacts with other students, the faculty, the administration, and the outside world. This is the part of the office that is, to me, the most enjoyable, and so throughout this last year I have kept expanding my connections. I have much contact with members of all the houses, and keep in close contact with the Tech, the Big T, the Caltech Y, and other organizations. The faculty and administration contacts are already made, and I can expand on them.

There are many problems that need to be dealt with: the size of the student body, the Coffeehouse (new location and policies), getting the Big T out on time, housing, and making sure Frosh Camp continues. These are a few that I am already working on. In an area of personal interest, I'm still interested in using ASCIT to improve social life. I was involved in the Y's efforts in this direction, and believe I can build on this base.

In all, the last year as ASCIT President has been an interesting challenge, and I would appreciate the chance to continue on. So on Monday, vote early and often.

—Ed Bielecki

Lucha

In my opinion, the most important functions of ASCIT are—to act as a forum for student views and wants, to attempt to fulfill these wishes to the extent of its abilities, and to make student life at Tech as satisfactory as possible in those areas where ASCIT can help. This would also help the Administration find out what we really want. You can't please all the people all the time, but, as it stands now, a lot of people are getting pleased none of the time. I would sincerely try to remedy this to the best of my ability. My major emphasis would be in improving student life outside of the curriculum; we will probably have someone quite capable of handling academic affairs. Caltech can be quite intolerable at times and a lot of ASCIT money which is spent elsewhere could be better used in this respect. I would try to increase our revenue from the Alums by making them aware of student desires and problems (which the Alums are sincerely concerned about). Companies and other outside organizations could also aid in the monetary aspects by way of nonacademic scholarships.

I really do want to become ASCIT President and I feel the students as a whole should have more influence in how things are being handled at Tech.

—Eric Lucha

Wells

Over the past year, I've had extremely valuable experience as ASCIT Director for Academic Affairs, developing useful contacts among undergrads, grads, faculty, administration and staff. Out of these contacts has come a working familiarity with the machinations of this Institute—a familiarity essential to effective action as an executive of ASCIT. I mean such effective action as development and publication of the Teaching Quality Feedback Report, the instigation of the ASCIT Award for Excellence in Teaching, and lobbying for positive action on the student body size problem, items which I've pursued extensively.

I feel that the prospects in the near future for decisive, construc-

tive action on the part of ASCIT are excellent. With the search for a new Institute administration should come a reexamination of Caltech's fundamental goals. As ASCIT President, I would seize this opportunity to vouchsafe student interests. I feel that the undergraduate program is an organic part of these goals, that is, the undergraduate program in the broader sense is a vital part of Caltech. It is the totality of experiences—not just curricular affairs—that makes undergraduate life here a unique experience.

Student Government affects undergraduate life in several ways: overtly by publications, activities, and disbursal of funds; and covertly, by interceding in administration and faculty on the students' behalf. I believe that my experience well qualifies me to coordinate ASCIT's activities as well as to foster the development of new ones.

I would very much appreciate your vote and urge you to consider all the races carefully.

—Bert Wells

IHC Chairman

DUTIES OF THE IHC CHAIRMAN. The IHC Chairman shall be a member of the Board of Directors. He shall call and preside over meetings of the Interhouse Committee. He shall be responsible for liaison between ASCIT and the various house organizations.

Kaler

I would like to briefly explain my opinions on the IHC, and my reasons for seeking the office of IHC Chairman.

The IHC is a very important part of student life, for it provides the method by which the houses, the most vital part of undergraduate life here, can resolve their differences and work together.

Probably the most important duty of the IHC chairman is to insure the smooth running of freshman rotation. As vice-president and rotation chairman of my house, and as a member of last year's rotation referendum committee, I have had some valuable experience with the problems of rotation.

The IHC is also responsible for the Interhouse and Discobulus athletic competition. I have been an Athletic Manager for my house, and I feel I'm familiar with the operation of these activities.

Another of the IHC chairman's duties is to sit on the ASCIT Board of Directors. I was elected ASCIT secretary two years ago, and served on the BOD for a year. During that period, I learned a lot about ASCIT, and I would like a opportunity to apply that experience.

Finally, this coming year will bring some unique opportunities for the IHC, as the most representative of the ASCIT organizations, should play a large

part. Also the Caltech undergraduate student body is growing, and many feel this is a detriment to the house system. Again, the IHC should play a large part in making the student opinion known. As chairman, I will take the time and make the effort necessary for the IHC to be heard.

—Eric Kaler

Morrow

The IHC is the body which represents the student houses collectively and which governs relations between them. The responsibility of the IHC extends to many areas of direct interest to students; for example, one of the first tasks facing the new IHC will be to review Saga's bid for next year. After that, the next important task of the IHC will be approval of the rules for next year's rotation. The effect of having no gag rule on this year's rotation should be evaluated before the new rules are approved. The appointment of students to faculty committees is one of the least recognized, but most important, functions of the IHC, for those appointees are the voice of the students on those important committees. The selection process must be careful and thorough to provide the student body with the best representation possible. Finally, the IHC runs rotation. In addition to those special tasks, the IHC

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Director for Academic Affairs

DUTIES OF THE DIRECTOR FOR ACADEMIC AFFAIRS. The Director for Academic Affairs shall be a member of the Board of Directors. He shall be responsible for committees formed by the corporation on academic affairs. He shall work with members of the corporation who represent it on faculty committees.

Berger

As probably none of you are aware, I am currently running for the office of Director of Academic Affairs. I have been associated with the Educational Policies Committee, the group that puts out the T.Q.F.R., and which the Director is the head of, for 2½ years now, so I am fairly familiar with the operations of this group. I have helped put together the last few TQFR's, and by now I am quite familiar with both their strengths and weaknesses. I have seen strong committees, that actually have tried to influence the Institute's academic policies, and weak ones that have done little more than print up statistics on common classes. I feel

that it is time that the E.P.C. become a useful branch of ASCIT, and not just a waste of money that could better go to other purposes. If elected, I intend to do just that.

—Marc Berger

Fisher

Hello my name is LeRoy Fisher. I would like to be your next representative on the Board of Directors in the capacity of the Director for Academic Affairs.

I would be surprised if someone told me that they came to Caltech for the social life, or the climate, or because they wanted a rest after a hard time in high school. To be a student at Caltech is to know the meaning of academics. Academics

are what sets Caltech apart from the other Institutions of the country and perhaps of the world. In order to have a good academic program, it is necessary that there is a continual exchange of ideas and reactions between the students and the faculty and administration. Without this interaction the learning process would most likely degenerate to the equivalent of a poorly conceived correspondence school.

The thought that this might happen is to me a very sickening one, as I hope it would be to you. I do not foresee such a thing happening, of course, but as good as it is, there is always room for improvement. That is what this office is all about. The Director for Academic Affairs represents you, both on the Board and on faculty committees, in an attempt to provide a better and more enjoyable educational process for you, the students of Caltech. I would like to be your representative for the next year to the faculty and administration of Caltech. I think I can do this in a capable and responsible fashion. I would appreciate your vote on election day. Thank you.

—LeRoy Fisher

Secretary

DUTIES OF THE SECRETARY. The Secretary shall, during the absence of the President and Vice President, assume the duties of the President. The Secretary shall keep a record of the proceedings of the meetings of the corporation and the Board of Directors. He shall post, or otherwise make public, copies of the record of each meeting within three days subsequent to that meeting. He shall post notice of all meetings of the corporation in which legislation is to be acted upon or discussed, together with a complete statement of such legislation at least seven (7) days prior to the meeting. He shall maintain a current file of the minutes of all the meetings of committees responsible to the Board of Directors, and all committees and organizations having interests common to those of the Board of Directors.

McDonnell

The ASCIT Secretary is largely responsible for insuring that

V.P.

Continued from Page Six

ties for violations that everyone will know about and respect. For instance, instead of kicking someone out of school, we could recommend that this person be made sterile. Permanently. Given the choice, which penalty would you choose? Now think how effective this would be in reducing violations if the sterilization were done in public. We could have the Glee Club sing some appropriate songs and ... For minor violations we could just have the guilty weathen staked out on the side of Millikan for a whole day as a warning to those contemplating evil things. Anyway, you get the idea. (For your sake, you'd better!)

Another big idea I had was giving the ASCIT V.P. a salary. That idea, though, is probably best left for private consultations between me and the next ASCIT Treasurer!

Anyhow, these are just a few of my ideas. In conclusion, I would like to say that you can vote against me, but if I do win, it's not going to be very healthy for you!

Sincerely,

—Chris Sexton

ASCIT remains a smoothly-working corporation. Over the past year, I've seen what it takes to do a good job. It means handling correspondence, taking care of nominations for office, coordinating the affairs of a number of committees, and compiling accurate records of ASCIT proceedings, as well as insuring that this information is distributed at-large. In particular, I've always made an effort to publish an accurate, detailed account of the business of the ASCIT Board of Directors; I think it is important for the rest of the campus to know exactly what is going on, and what the BOD is doing about it.

In a broader sense, however, in keeping with the goals of the office, it is equally important to go beyond these basic responsibilities. A conscientious secretary, I feel, is one who is also willing to take the load from the other members of the BOD when needed.

Finally, the secretary *does* have a voice in ASCIT. I still believe, as I stated last year, that a responsible secretary is one who is willing to take an active role in getting things done, as well as in getting things across.

I enjoyed working over the past year, doing what I could to do a good job as ASCIT secretary. After a year of experience, I can only say that I'll make every effort to do even better. I hope you'll give me that chance; I'll certainly appreciate it.

—Tom McDonnell

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Chairman handles a large amount of normal business: interhouse relations, maintaining communication between Jim Mayer, Mr. Gang, and the houses collectively, and interhouse athletic affairs. Unfortunately, the IHC has obtained the image that it only handles normal business and rotation in the eyes of many students. The job of the IHC Chairman is basically administrative although he does serve as the prime representative of the house system to the administration. He must remain impartial and use his power in moderation. I believe that I would make an effective and equitable IHC Chairman.

—Jim Morrow

Rousseau

The IHC too often becomes merely an arena for settling squabbles between houses. This is not the fault of merely a single individual or house; most have shared in creating the problem. This is a negative approach to student government and only provokes further ill-will.

The IHC should be an organization that accentuates the positive: it should promote cooperation and mutual respect between people and houses. It should realize individuals first and members of frequently cliquish houses second. The IHC could (and should) do much to provide opportunities for inter-house

Treasurer

DUTIES OF THE TREASURER. The Treasurer shall receive all money belonging to the corporation and shall deposit it to the credit of the corporation in such bank or banks as the Board of Directors shall determine. He shall keep a full account of money expended and received and shall make a report of such account once a term at a regular meeting to the Board of Directors, and at such time as the Board of Directors may desire. He shall be a member of the Board of Directors. At the end of each fiscal year, the Treasurer shall have the books of the corporation audited. The Treasurer at the close of each school year shall have the books checked by the new Treasurer. He shall receive and present to the BOD term and annual reports of the ASCIT publications. He shall have direct charge of the corporation offices and all corporation property.

Jones

ASCIT fiscal policy is something which has not come under debate for some time. I have had no complaints about the way ASCIT funds have been handled this past year, but I feel I can add some perspective and experience to the Board of Directors.

ASCIT money comes from the students. The sum collected by ASCIT is very large—even considering that dues have not been increased for many years. I do not favor raising or lowering the dues, but perhaps more creativity in their use is called for.

Publications have been a growing problem in the past two years—a problem very close to my heart. There seems no way to insure that our Big T or little t or, God forbid, Totem will appear at all, much less on time. Threatening to reduce or remove the editor's salary is not the answer—we might never see a book if that happened. Perhaps a bonus is in order for an editor who publishes on time.

ASCIT funds can be, and have been used to visibly improve student life at Caltech. I was very excited about the ESC's daring attempt at a semi-formal dinner-dance affair, doomed to failure though it may be. Perhaps it's this daring approach that is needed to give ASCIT and the undergraduates a shot in the arm.

I learned a great deal about the workings of ASCIT from participating as an observer, reporter, and publications editor. I helped revive the little t and the California Tech a year ago after near-disaster. I would now like to serve in a more direct manner.

I won't try to please everyone. But I will do all within my power to make undergraduate life at Caltech more fulfilling. Please vote for Mojo, that's Morris Jones, for ASCIT Treasurer.

—Mojo

Schwartz

This year I was *little t* Editor and Business Manager, and for the first time in years, the *little t* was out on time, registration day of first term, and it made a profit. This shows that I am reliable and can handle money well. These qualities are important in the performance of the duties of the Treasurer, the person who actually spends your money. The Treasurer is also responsible for the appointments of people to a number of important offices such as *Big T* Editor and Business Manager, *little t* Editor and Business Manager, Coffeehouse Managers and the *California Tech* Business Manager. Since I have held several of these posts, I have a good idea of the type of people best suited to fill them.

It is for these reasons that I am running for ASCIT Treasurer. If you want someone who will do a good job, please vote for Mike Schwartz.

—Mike Schwartz

BOC Secretary

Sirri

Erik Sirri has not submitted a statement.

Please Turn to

Page Eight

for more

Campaign Statements.

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Director-At-Large

DUTIES OF THE DIRECTORS-AT-LARGE. The two Directors-at-Large shall be members of the Board of Directors. They shall be responsible for conducting the Red Cross Blood Drive and the Consolidated Charities Drive. They shall maintain a calendar of events which are of interest to members of the corporation. In addition, they shall perform other duties as specified by the Board of Directors.

Beausoleil

No statement submitted.

Boyar

Hail. My name is Alan Boyar and I am a friendly frosh. If anyone has any problems that need assistance, just come to me.

Kerns

No statement submitted.

Miller

Ascit right now is plagued by complacency. Students are reluctant to get involved with anything anymore. Hopefully this can be changed. We need a stronger student body, through which we can modify our environment to best suit our needs. I will do my best to achieve this goal.

—John Miller

IHC

Continued from Page Seven

I want to say is that I'm responsive, willing to cooperate and work toward these ideas; and I would like the chance to try.

—Ken Rousseau

E. Wold

I have seen times when the IHC has been a mere playground for petty grudges and its scope of power has been limited to a bit of house hand-slapping. The idea that this is all that the IHC should be is completely wrong, and should be changed. In general, I see the IHC as an odious volcano, serving no purpose whatsoever for the most part, and only erupting when it has decided to persecute one house or another for some infantile reason.

That is why I want to be IHC chairman. I would like to see a student government which is responsive to the houses and to the individual students, and which presents their valid grudges to the administration. Policies at Caltech, such as mandatory food service, bother people enough to at least be questioned, and the problems with these concepts should definitely be brought to the attention of the people who make the policies.

I would also like to see an IHC which does not promote interhouse squabbles, but instead acts in a rational way so as to benefit all the houses, and which mostly stays out of the individual house's business.

—Erling Wold

Paxton

In my past two years at Caltech, I have seen ASCIT (or rather, its Board of Directors) do relatively nothing for students except hand out money. There are many problems, such as parking on the Olive Walk, that affect all of us. As representatives of the student body, the Board of Directors should be willing to do something about these problems. I am willing to circulate petitions, speak to the faculty, and do whatever else needs to be done to relieve us of these problems.

As a student at Caltech, I sometimes get the feeling that my opinion is never heard and that many times, decisions are made in the best interest of the house with the largest voting power. A Director-at-Large has the responsibility of representing all of the students, not just those in his own house. I am a social member of two houses and have many friends in the other houses, so I feel that I can truly represent the general feelings of the students. As an at-large member of the ESC, I feel that I did just that.

A Director-at-Large would be a representative of all students and should be willing to help them. With your help I can be more than just one vote on the BOD.

—Leslie Ann Paxton

M. Wold

I am running for Ascit Director at Large with the hope that by being elected I will be able to get "involved." I would like very much to see problems like the one we are having with undergraduate housing solved. I would also like to see the question of increasing the size of the student body answered in a way which will not drastically change the unique learning atmosphere we now have. So by being on the Ascit Board of Directors I hope to be able to see that these and other problems can be solved in a reasonable way.

—Marc Wold

Athletic Manager

There are no candidates for Athletic Manager.

Vote No

On No

Director for Social Activities

DUTIES OF THE DIRECTOR FOR SOCIAL ACTIVITIES. The Director for Social Activities shall be a member of the Board of Directors. He shall be chairman of the Social Committee. He shall be responsible for the organization of the corporation's social activities and shall coordinate them with the social activities of the undergraduate Houses.

Goldikener

No statement submitted.

Gutierrez

The purpose of the Executive Social Committee is to plan and organize all the social functions of ASCIT. The Director for Social Affairs is responsible for the coordination of ASCIT's social activities with the social activities of the undergraduate Houses. These social activities should involve as many ASCIT members as possible and encourage interaction between the student houses.

In the recent past the ESC has begun to move closer to accomplishing the goal of getting interaction between the houses (funding for single-house events has been limited). But the ESC has failed to make sure that each member of ASCIT has equal

access to the available funds. The types of events which are currently being sponsored favor certain houses over others and the members of these other houses are not getting their fair share of ASCIT funds. Since each member of ASCIT pays the same amount of dues, it is only logical that the funds should be used to benefit each member equally.

Admittedly, this is not a simple task to accomplish. However, I think that it is possible to distribute the funds more evenly by encouraging multi-house events (i.e. give more funds to events that include more houses) and by organizing more activities that include all seven houses through the ESC. As Director for Social Affairs I would be in an excellent position to provide all ASCIT with their fair share of ASCIT funds. With the help of the social chairmen from each of the houses and the Directors-at-Large, I would make the ESC work for all the students without

favoring a select few.

—Paul A. Gutierrez

West

As Director of Social Affairs I will work actively with the Houses' social chairmen in an effort to better orchestrate social affairs; i.e., make sure there's a party somewhere almost every weekend.

—Larry L. West

News Briefs

OK, Where's The Fire?

A false alarm was sounded about 5:00 p.m. on Monday, January 17, at Spalding Business Services building. Three hook and ladder trucks and two utility vehicles responded to the call. The fire department sounded "all clear" signal within minutes, and they reported no damage.

For Those Who Eat Food...

The Caltech Food Co-op seeks new members. We buy fruit, vegetables, cheese, grains, etc. each week. Save 30%–50%. Call Mitch at x2407 or Maurice at x2066.

Activities Chairman

DUTIES OF THE ACTIVITIES CHAIRMAN. The Activities Chairman shall manage the ASCIT movie program.

Marcadis

No statement submitted.

Smith

Too long has one bloc dominated the selection of the ASCIT movie. This regime has been in control so long, it has become destructive. The situation has degenerated to the point that the present regime cannot find anyone who really wants to be Activities Chairman; nevertheless they so want to remain in power that they convince someone to run anyway. This is what happened last year. The results were: generally less than adequate movies, and definitely inferior operation of the equipment. Whatever happened to the music before the shows? Why does it take ten minutes to focus the projector? Why must we all crowd into 153 Noyes? The answer: the Activities Chairman does not want the job and puts very little effort into its performance. There is a great danger that this will happen again. My opponent has been selected by the same powers that be that brought you last year's Activities Chairman. It is time to take this badly abused power away from the present regime. It is time to get some new ideas in movie preference, and some real enthusiasm for the job. This is why I urge you to vote for me, Steve Smith, for Activities Chairman.

—Steve Smith

Tech Editors

Drum - Fuhrmann - Kellner

Pick up a copy of *The Tech* from the beginning of the year. Now pick up a more recent copy. We have been running *The Tech* for the past month and the issues we have produced are significantly higher in quality. There is more news on the front page, more features, better sports, several new columns and other additions (the weekly photo spread, "The Week in

Review"). If elected this standard of quality will continue throughout the next year. If not then no one knows what *The Tech* will look like or what will be in it. Don't gamble with your vote; elect three proven editors. On Monday, vote for Kellner, Fuhrmann and Drum for editors of *The California Tech*. Our campaign statement has been in your hands for the past month.

All the News That Fits

Three chamber music concerts will be presented by the Caltech Woman's Club to benefit the children at the Child Development Center for Caltech Families. Opening the series on Friday, January 28 at 8 p.m. will be members of the Los Angeles Chamber Soloists performing "The Wind Divertimenti" of Mozart. The concert is set for the Baldeschwieler residence in Pasadena.

On Friday, February 4 at 8 p.m. in the Caltech Athenaeum, "Musical Offering," principals of the Los Angeles Chamber Orchestra, will perform music by Bach, Telemann, Fasch, and Vivaldi.

At the Greenstein residence on Friday, February 11 at 8 p.m., the final concert of the series will take place. Music by

Debussy, Mondello, Ibert, and Persichetti will be performed.

Tickets are available at the Caltech Ticket Office, 332 South Michigan Avenue in Pasadena. For additional information call (213) 798-7043.

Problematic Needles

There will be a meeting of the Caltech Math Club this Wednesday, January 26. The special attraction will be a film produced by the Mathematical Association of America concerning the Kakaya Needle Problem. The wide screen technicolor masterpiece features sensurround. The screening will be in 151 Sloan at 7:30 p.m., and a reception will be held immediately afterward.

Ortho-k

Continued from Page One

blurred circle. With astigmatism, another optic disorder which can exist by itself or with myopia or hyperopia, there is more than one point of focus.

These three refractive errors are the result of the length of the eyeball and the curvature of the cornea. If the eye is longer than normal or if the curvature is too great, the point of focus will be short of the retina, and myopia will result. If, however, the eye is shorter than normal or the cornea is too flat, the focal point is behind the retina and hyperopia occurs. Irregular curvature of the cornea produces many images and the problem of astigmatism.

The Cure?

While changing the length of the eye is, of course, impossible, optometrists have been able to alter the curvature of the cornea. This is the foundation of the orthokeratology process. Ortho-k was first used in the late 1950's by a Chicago optometrist, Dr. George Jessen. The discovery was quite accidental: improvements were noticed in the corneal shape of the eyes of normal contact lens users.

Any well-fitting contact lens will alter the corneal curvature over a given period of time. The fitting of flatter and flatter lenses will cause the cornea to flatten out and the degree of myopia to lessen. The lens actually pushes against the cornea to flatten it out. (The cornea must be steepened in the case of hyperopia.)

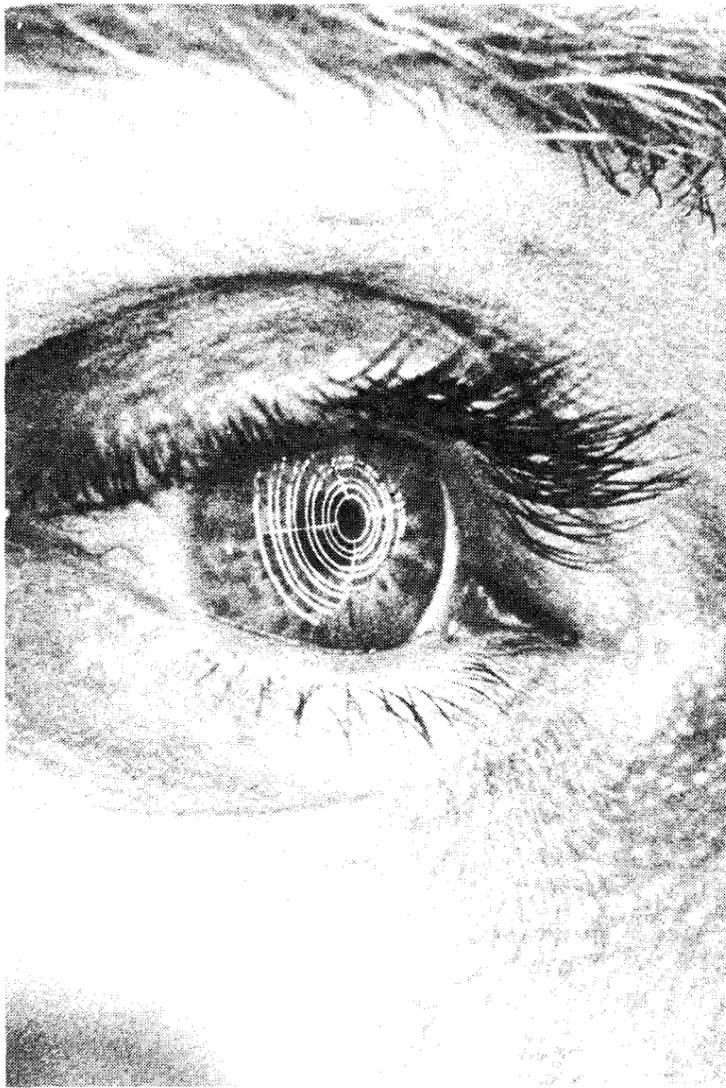
The treatment, which may cost from \$500 to \$2000 and last up to two years, begins with a thorough examination of the eyes and the fitting of special contact lenses. In six to eight weeks, new lenses are prescribed to allow for the changes (in the cornea) that have taken place. As the treatment proceeds, the patient receives new lenses, and the cornea responds to gradually assume the lens shape. Practically all changes occur within the first year of treatment. There follows a stabilization period of six months, during which the patient wears contact lenses that are curved, but have no prescription. During the final six months of the two-year program, retainer lenses are worn in order to maintain the improved profile of the cornea.

Wearing time for retainers varies with each patient. Though the average is five to six hours daily, some find one week out of four to be sufficient. For about 5% of their patients, orthokeratologists have found the results to be permanent—no retainer is necessary at all. When the visual error is 20/200 or less, chances for permanent correction are nearly 85%.

Although ortho-k has been applied chiefly to sufferers of myopia, the most common of the refractive disorders of the eye, it can be used to help combat astigmatism and hyperopia.

Seeing is Believing

The process described above has produced astonishing successes, some of which include:



Eye being tested for curvature in preparation for Orthokeratology.

- A West Point cadet who is trying to get into the Air Force Academy has improved his vision from 20-400 to 20-20 after one year of treatment.

- A woman in her twenties who had 20-500 vision in both eyes has improved to 20-50 after one year's treatment.

- A six-year-old girl whose vision had been deteriorating 50% every three months left her braille classes and began Ortho-k treatment. Now, at age 15, she has 20-20 vision.

- A New York City policeman—on suspension for lying about his 20-200 vision—underwent six months of treatment and now has 20-40 vision and a new job in a neighboring police force.

- A 30-year-old woman started with 20-2600 vision and could not see the big E on an eye chart. Now after two years of treatment, she has 20-70 vision and can function without lenses when necessary.

The Controversy

Patients all over the country call the results "amazing," but some eye specialists use another word to describe ortho-k—they call it "unbelievable." At present, neither the American Optometric Association nor the AMA has formally endorsed the process.

Orthokeratology is practiced almost exclusively by optometrists (O.D.s); who are licensed to prescribe eye care and vision aids, but not trained to perform surgery or treat diseases of the eye, as are ophthalmologists (M.D.s). Many ophthalmologists are skeptical of the benefits being worth the inherent risks and possible long-term effects involved.

Dr. Stuart C. Grant, O.D., of Beverly Hills recently consented to a *Tech* interview during which he related his views on the

current controversy. Grant, a pioneer in the field of orthokeratology who helped develop the special contact lenses, has written and lectured extensively on the subject. According to Dr. Grant, criticism such as "It's like binding a foot to fit a shoe." stems from a lack of understanding of the method. "We do less to change the eye than with regular contact lenses. And we control the process." Wearers of normal contact lenses have check ups only once or twice per year, even though their lenses change shape within a few weeks and no longer fit as they originally did. Ortho-k patients have more frequent check-ups and lens changes, and thus always have a "perfect fit."

The essential criterion for medical adoption and endorsement is the treatment's safety. According to the orthokeratologists, major improvements are attained by very minor changes in the cornea. The process is painless and the eye is insensitive to the even pressure exerted by contact lenses. Opponents of the method sometimes question the extent of changes created in the cornea, that is, is the pressure on the cornea even? They argue that the center of the cornea is the only part being flattened. However, evidence gathered by an independent testing lab seemed to disprove the claim. Every cornea studied "flattened equally from center to periphery."

Many ophthalmologists fear that the prolonged use of extremely flat lenses will create a permanent warping of the cornea and thus cause severe astigmatism. Orthokeratologists argue that contact lenses are extremely safe and that there are advanced methods of detecting the slightest corneal disturbance. The frequency of their patients'

check-ups allows for the early correction of any problems that could lead to scarring and warping.

Another worry of ortho-k is the possible increase of intraocular pressure due to the flattening of the cornea. This could result in glaucoma and lead to blindness. One optometrist, though, recently checked 500 patients undergoing orthokeratology treatment and found not a single case of increased pressure.

Maintenance vs. Permanence

The second source of controversy concerns the permanence, or lack thereof, of the process. Dr. Grant readily admits that "it isn't all that permanent, that is, if one took away the lenses and never wore them again, there would be an 80 to 90% chance of some regression." However, he emphasizes, the program is one of maintenance versus permanence, thus analogous to dieting or working out in a gym. Still, Dr. Jerome Pearlman of UCLA does not recommend ortho-k in part because of its "impermanence." He maintains that "the physiology is unsound because once you remove the lens, the cornea will revert to the same shape it was before." To this orthokeratologists reply that: 1) they don't claim 100% permanence and realize that some patients will have to wear retainers to preserve improvement; 2) there's a growing list of people who can now function without their lenses all or most of the time.

Not everyone will improve to 20-20 vision. Realistically, a person who begins with 20-400 vision can improve to 20-40.

Since 1960 10,000 patients have been treated by orthokeratologists, yet there is no evidence of the "corneal warping" or induced glaucoma feared by many within the medical profession. Grant and his associates have treated 3000 patients, 99% of them successfully. "What we're doing is fitting the very best possible lenses. Only a specialist in contact lenses should be doing orthokeratology," says Grant.

Continued on Page Ten

McCorquodale in Yugoslavia

Continued from Page Three

objected strenuously and I was never called on to make a decision, the fellow taking off down the carriage for another compartment. I do know that I later see the fellow still on the train in Salzburg and Zagreb...

The night part of the train ride covered all the beautiful mountains of Austria such that one couldn't see any of them and the day passage traversed the flat plain plains of Serbia, where there are not even more than a handful of trees in the entire field of view at any given time. The countryside is poor and looks it. By now the compartment had rearranged itself with three Greeks coming in, one couple of which had nine, count 'em, nine, suitcases, and the Serb and the Albanians going to a compartment just down the

Comic Books

BOD Debates Coffeehouse Magazines

The meeting was called to order by Bielecki at 8:09 P.M. Present were Bielecki, McDonnell, Chess, Rea, Wells, Trimberger, Brotemarkle, Chang, Maxson, Bible etc. Plenty of coffeehouse managers and company took time out to show up; unfortunately, enough BOD members decided to be absent to place the total number one short of a quorum.

1.) The first order of business was the the complaints regarding the coffeehouse: Bielecki: "There has been considerable displeasure expressed over some of the recent coffeehouse changes. I wanted this to be official notification."

Trimberger: "It doesn't appear to me that this incident requires official notification. It seems to me that students should come and talk to the managers. It's not surprising in this case that more people spoke out against than in favor. Anyway, the pot party is one incident that's been taken care of you won't see that again."

Bible: "Who said there was a TV; it wasn't only thre two nights ago."

Bielecki: "Some person complained that there was a TV."

Trimberger: "Now let's get back to the comic books. That's a very touchy subject. Some people like them strongly, other dislike them strongly. We need something that a lone per n can read. We've been trying to get some better magazines. I don't know whether it's that people want to read or that they want comic books."

Bielecki: "I've heard that people want to read something while they're there."

Trimberger: "I can see that. But comic books produce a strange atmosphere."

Bielecki: "The problem with

Continued on Page Ten

corridor. As one of the Greeks explained during the move, "Jugoslavians mit Jugoslavians, Greek mit Greek. Das ist gut." It also makes crossing the border easier as they search most Jugoslavians entering the country but leave the Greeks alone as they are usually just passing through (usually? Hell, invariably. I sometimes think they know better).

The couple with the nine suitcases was also doing a pretty fair imitation of a traveling delicatessen, plastic sack after plas sack of fried chicken, bread, sausage, apples, tangerines, veal patties, pastries and *pivo*. To my benefit they took pity on the poor starving American and fed me well. A trip to the head proved quite educational. Aside from its smelling like the Chem 46 lab, one could pick out six or

Continued on Page Ten

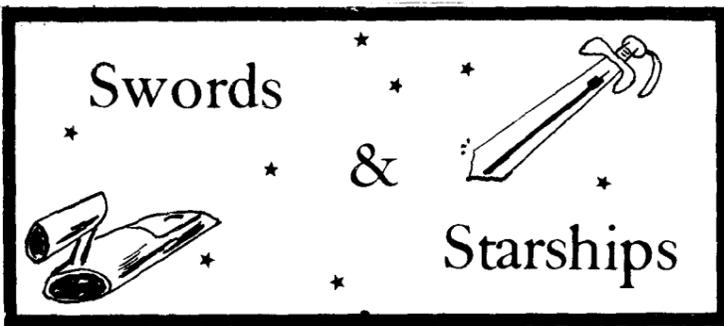
Jugoslavia

Continued from Page Nine

seven different colors of regurgitative partings with *pivo* on the floors, walls, and believe it or not, the ceiling. Being slightly nauseated I gave Nature's call the busy signal and returned to my seat, awaiting Beograd in uremic discomfort.

A mere three hours late the train hauled into Beograd and waited at a dead stop for thirty minutes before being cleared to enter the rail yard and disburse its drunk and exhausted passengers. At least when an airplane is circling you have a feeling of motion and something being done to reach the end of the journey, but we just sat there. Doing nothing until the people in the rail yard got their shit together and the "Express" could come in.

Falling down the stairs with my suitcase, I had reached Beograd and bid goodbye, with very little love lost, to the Yugoslavian Express. Trucking down the platform I was suddenly collared by four burly chaps in military uniforms who were asking nasty questions I couldn't for the life of me decipher. This was going to be bad I thought, as my mind swirled along without sleep and encroaching uremia (I've had it for two paragraphs now). They took my suitcase and began poking at it with a metal detector, from all that I adduced. They were poking it rather severely as it's canvas, and I had visions of it ripping open, spilling the clothes I was carrying for a chick all over the platform, standing there with the longest hair in Beograd, encroaching Brain Fever and "Up against the wall redneck mother" running through my head. But there wasn't enough metal to tip the detectors and my sack slightly lumpier, was returned without comment by the soldiers. I gleefully ran for the restroom and, after a pause that refreshed, took a taxi into Beograd, bee-lining for friends and rest.



Planning to flick in an evening with a good book? Or even a bad one? (That desperate, huh?) Well, take heart, for this week's column is devoted to a few new releases to tickle your little eyeballs.

The Sailor On The Seas Of Fate, by Michael Moorcock is billed as a novel, but is only loosely so. Actually, it is a group of novelettes tied together after the fact. This most recent in the ongoing saga of the doomed hero/villain Elric of Melnibone, has touches of quality although the book is a trifle forced and disjointed. The format is largely to blame: part of the book takes place in the middle of another book, with only a change in viewpoint, while another part had been previously published and not well received.

The title stems from the fact that the three novelettes all involve sailing and ships as major parts of the plot, as well as the fact that Moorcock is getting rather heavy-handed in his reminders that his characters are all toys in the games played by Fate. This book is fairly strong Sword and Sorcery stuff, because Moorcock is basically a very good writer even on his off days. It is, however, nowhere near his best. If you liked earlier Elric stories, or others of the genre, pick this one up. It's \$1.25 in the DAW edition currently available.

Also, DAW has brought several of Moorcock's other books back into print: *Elric of Melnibone*, a correctly-edited version of a book that mistakenly was issued by Lancer books a few years ago as *The Dreaming City*, (causing much confusion with another story of the same name) is an excellent book if you can stand a downer. That, by the way, is the major reason more people don't like Moorcock. He doesn't believe in happy endings,

beginnings, or middles. He just tells such great stories... Another book brought back into print is *The Jewel in the Skull*, the first in a series of four books about Dorian Hawkmoon of Koln (yes, the one in Germany), set in a very bizarre future. It's one of those sword and science mixtures that has ornithopters and ray guns and giant riding-flamingoes (I told you it was bizarre) and that sort of thing. Sort of space opera that never leaves Earth. Again not Moorcock's best, but a lot of fun in some ways. Still another book which should come out in a few weeks, also DAW (I think) is *Tales of the White Wolf* or something like that, apparently another Elric book, but you never know about Moorcock.

For those of you who like your action a little bit more straightforward, good old-fashioned slam-bang space opera where the good guys will win in the end, have I got a book for you! *The Clockwork Traitor*, by Stephen Goldin and (posthumously) E.E. "Doc" Smith. This is the third in a series of books apparently begun by Smith and being finished by Goldin with Smith's widow's permission. The first two *Imperial Stars* and *Strangler's Moon*, established a future in which a form of hereditary monarchy complete with a system of nobility has become the overall form of interplanetary government. Just like any such system, there are and always have been plots against the throne. Unlike such systems in the past, this monarchy has a reasonably efficient secret service, Service of the Empire (SOTE), with an incredible subsection: a circus. Not just any old circus, mind you, but a circus worthy of the name "Circus of the Galaxy." It makes anything Barnum ever put on look like non-Carter peanuts. Among other things, the entire staff of the circus are all members of one family, the D'Alemberts. This family has been living for centuries on a planet with a surface gravity of around 3Gs. For obvious reasons, at normal gravity, they are rather strong. With typical Doc Smith disregard for the problems of actually surviving there in the first place, the plot line goes on to establish the fact that the

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BOD Debates Coffeehouse

Continued from Page Nine

magazines is their datedness. I don't see why comic books can't be included with the other magazines."

Brotemarkle: "One of the reasons for the coffeehouse is to stimulate conversation. Comic books really stifle conversation."

Rea: "Often the stereo is so loud that conversation is impossible anyway."

Trimberger: "You'd have to talk to the manager about that."

Rea: "Have there been any compliments on the changes or just complaints?"

The managers reply that there have been some compliments. However, they think that the complaints have been more boistrous.

Maxson: "The purpose of the coffeehouse isn't to have comic books."

Bielecki: "True but you're cutting off the people that want them. Some people said that they aren't coming back. I certainly don't want to go in and read U.S. News and World Report." (While furiously taking down the conversation, McDonnell mumbles something in defense of U.S. News and World Report, to which Bielecki replies, "Well, you'll get him (McDonnell), but I'm not sure how many others are going to be happy.")

Rea: "I personally like the idea of getting rid of the comic books, but I feel compelled to represent others who have strong sentiments in favor of them. I'd like to propose a resolution—we can't vote on a formal resolution since we don't have a quorum—to get student opinion of the changes."

Trimberger: "I wouldn't like something that formal."

Ideas are expressed to include the question as a student opinion poll on the ballot in the upcoming election.

Maxson: "I don't see why it's not the managers' decision."

Rea: "It says in the By-laws that it's not the managers' decision."

Trimberger: "I don't see any reasons either for or against it. I think it's reasonable to try it out."

Rea: "For how long?"

Bielecki: "Should we tell the people against the changes to boycott the coffeehouse?"

Chess: "We should tell them to complain to the managers."

Trimberger: "It's sort of balanced out now; there have been no comments either way this term. Oh, Larry Paulsen complained...in fact, each time I

see him. I'm not familiar with the clientele. Some people haven't seen in a while; some I've seen for the first time."

Chang: "The people who do are happier."

Bielecki: "Nothing like subjective comment!"

Trimberger: "It seems to me you would have to have gotten a wide variety of complaints. I'm not so sure there has been a very good cross section. But tell these people that there will be new reading material. If they want comic books too, we'll go out and get them."

Wells: "I think we could have a really good referendum."

Chess: "Why don't you get any comic books?"

Chang: "It wouldn't be a problem, but I think that the diversity should be left up to us."

Trimberger: "Are you willing to wait, or should we go out tomorrow and buy comic books?"

Bielecki: "We can wait, but procedural changes must be approved by the BOD. I suppose we can call this an experiment."

Trimberger: "We didn't think

Continued on Page Eleven

Ortho-k

Continued from Page Nine

Orthokeratology is just now becoming widespread. While thousands of people today are proof of the process' success, very little research into its long-range effects has been made. Ortho-k will have to be evaluated in order to determine any damaging effects on the cornea, muscles and interior structure of the eye. While there have been no reported cases of major damaging effects due to ortho-k, there remains the lack of a study of a large enough number of patients.

Americans are rapidly becoming a myopic people. Induced myopia due to studying watching television, and just plain bad habits—like working in poorly lit areas—is increasing. It is estimated that half of U.S. college students suffer from myopia induced by the strain of intensive studying and reading. As this trend continues, ortho-keratology could become an essential part of medicine. It is hoped that further research into the process will justify the work of Dr. Grant and other ortho-keratologists.

[To obtain more information you may write: The Ortho-keratology and Contact Lens Group of Beverly Hills, 450 N. Roxbury Drive, Beverly Hills, CA 90210.]

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BOD Minutes

Continued from Page Ten

this would cause so much of a problem."

Bielecki: "We can give you more time. But you'll have to come back."

Trimberger: "We're reasonable people, too, we're not fighting you."

Rea: "I can see your objections to the poll. There's too much of a possibility that there might be some weighting due to frivolity or whatever. I'm willing to withdraw my motion, but what do you have to offer? Could you write an article to *The Tech*? How would you measure the response?"

Brotmarkle: "You realize that this has gotten bigger than it was originally?"

Bielecki: "It's controversial; you can either go back to the way it was before or accept the measures."

The matter was closed.

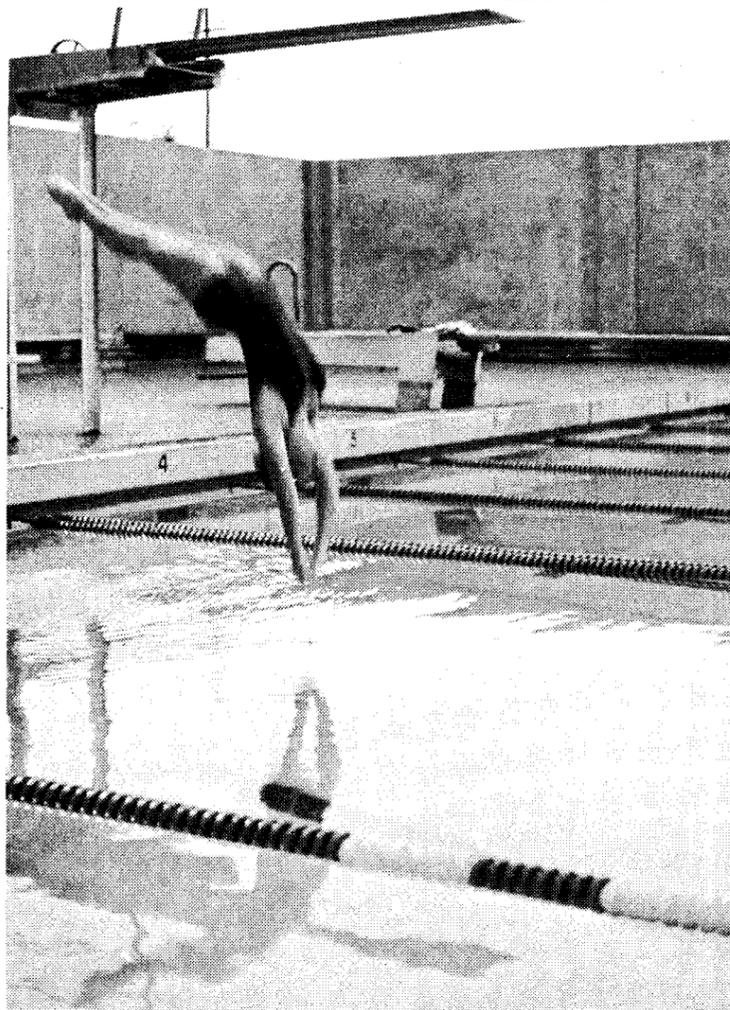
2) Bible mentions that the ASCIT bus is signed out three days out of every week until June to José Helu who uses it to go to and from a class at Oxy, and that this is unreasonable. The BOD agrees that this is the case and will talk to Helu. Chess suggests a raise in the price charged to users of the bus; the present rate is insufficient to cover costs. Maxson says that Helu had promised to give anyone else priority if they wanted to use the bus, but that the matter was one of personal use over long periods. Chess mentions the ASCIT bus is subsidized at \$750 per year. Part goes toward depreciation part for maintenance. It doesn't cover replacement costs. Rea suggests that Chess and Fisher figure out a new rate system and reassess the cost for individuals as opposed to groups.

3) There was a discussion about where to hold next week's meeting, as providing refreshments (Chess: We could have the coffeehouse cater.). Eventually, it is decided that Monday night is the only night acceptable. After consideration of Winnett (not acceptable) and the Ath Bar (ruled out), at Rea's suggestion it is agreed to meet in the Millikan Board Room. Bielecki will try to reserve it.

4) The meeting is unanimously adjourned at 8:45 P.M.

Math Department Offers Two Prizes For Mathematical Work

The Mathematics Department is offering two categories of prizes for mathematical research and problem solving. The E.T. Bell Undergraduate Mathematics Research Prize is a \$150 cash award for the best original mathematics paper by a Caltech undergraduate. Contestants for this prize must be nominated by a faculty member familiar with their work. Each contestant is entitled to one entry which must be turned in in final form by the



Photo—Dave Wheeler

Diver Lynn Hildemann during meet with Ambassador College

Swimmers Beat Ambassador 60-50

By Josh Levin

Caltech's men's swim team got off to a good start, defeating Ambassador College 60-50 in the first meet of the season. Out of the 11 swimming events, Caltech won seven - often taking second or third place in the others.

John Reimer won both the 100-yard and 200-yard freestyle. Josh Levin won the 50-yard freestyle. Doug Jones won the 200-yard Individual Medley and Werner Pyka the 200-yard backstroke. Tech won both relays with Pyka, Stan Chen, Chris Sexton, and Jack Bennet swimming 400 yard relays, and

Reimer, Jones, Levin, and Jim Seidel swimming the 400-yard freestyle relay.

Caltech's victory came despite the forfeit in diving due to the lack of the men's team.

Unfortunately for the women's team, Ambassador has no women's team. Nonetheless, the women swam the same events as the men in between the men's events. The strength of the women's team was evident in the times they turned in. This combined with the strong diving of Lynn Hildemann promise a good year for the women.

Swords and Starships

Continued from Page Ten

entire circus is a vital part of SOTE, not only because they are not obviously agents, but because they are so good at it. Out of each generation of D'Alemberts, two members are picked to become SOTE's best operatives. In the first two volumes this generation's two, Jules and Yvette, succeed in thwarting evil plots. This third one revolves around a plot, apparently against the life of the Crown Princess of the Empire of Earth, but actually even worse than that. Doc Smith

was always a flamboyant writer, and Stephen Goldin is following admirably in his footsteps. The only major change in style is that Goldin is noticeably less male-chauvinistic than Smith was, possibly because Goldin's wife is a good writer in her own right. Anyway this book is worthwhile even down to the cover, which is actually accurate (almost unheard of in paperbacks). Price: \$1.25, Pyramid books.

Those should keep you busy over the weekend.

—Nick Smith

Esquire Presents Movies

by Etaoin Schroedlu

As You Like It is one of Shakespeare's most charming and enjoyable comedies. Its continued popularity after almost four hundred years is well attested to by the frequency with which it is still performed: the first two months of 1977 offer Techers at least two opportunities to see this play. The Globe Playhouse, in West Hollywood, which I have discussed in these pages before, is just finishing a two month run of *As You Like It*, starring Shannon Eubanks (who played Beatrice in the Globe's recent *Much Ado About Nothing*) as Rosalind, Lane Davies, and Cristiana Bramlet. For the more stay-at-home types, or for those who enjoy comparing different performances, Caltech's Office of Public Events will feature the New Shakespeare Company of San Francisco's version of the Forest of Arden in Beckman Auditorium at 8:00 p.m., Saturday, Feb. 19. I saw this group (or at any rate a group with the same name) do *As You Like It* at UCLA last spring; their show was very enjoyable. Get in touch with the OPE office for ticket information: the ticket range is \$4.50 through \$6.50, with a student discount of one dollar.

The Bard Lives!

I believe that the old schoolboy's line, "At the end, everyone dies" was referring to the plot of *Hamlet*, and in that context it isn't true, quite. In *Lear* and *Titus Andronicus* for that matter, the comment is somewhat more true: they are among the most horrifying tragedies ever written. (I'm curious how the director of the latter play will cope with the stage directions for the entrance of the heroine with her hands and tongue cut off.) Who needs that kind of tragedy, you may ask, when midterms are coming soon? Well, for one thing Shakespeare writes a lot better than Feynmann does.

For those who prefer filmed Shakespeare to live Shakespeare, we bring you the 1977 version of the annual William Shakespeare Film Festival. Unfortunately, this year there's a problem: instead of the two or three theatres showing all of the films in the festival that we've had in the past, this year there is only one theatre booking the whole lot, and that's the Monica Twins, 1332 Second Street in Santa Monica, close to 30 miles from Tech. The Esquire Theatre, 2670

the ten movies, and they are all on week-day mornings (hardly a prime time for movie-going), with the special note: "Student-group screenings will be scheduled on weekday mornings, provided sufficient advance ticket orders are received two weeks prior to show date. RESERVATIONS REQUIRED." So clearly the Esquire bookings are chancy. In any case, below is the full ten scheduled for the Santa Monica end of town; the dates there are Sat. and Sun. at 11:00 a.m. from Feb. 26-27 through May 6-7, except for Easter weekend (April 9-10), respectively. The tentative Esquire dates are included for the five appropriate films; those starting times are all 9:45 a.m.

Much Ado About Nothing, Sam Waterston, Kathleen Widdoes. This is the Joseph Papp N.Y. Shakespeare version that was on TV several times a few years ago; I give it four stars.

The Taming of the Shrew, a la Zeffirelli-Burton-Taylor. (Esquire, March 7) Fun to see, once.

Romeo and Juliet. The strikingly beautiful Zeffirelli version with Leonard Whiting and Olivia Hussey. (Esquire, March 23)

Othello, Laurence Olivier and Maggie Smith. That's all you need to know, really.

King Lear, Peter Brook's version with Paul Scofield. A very strange version not recommended without reading the play first.

Julius Caesar, 1953 style, with John Gielgud, James Mason and Marlon Brando. If you figured out that Mason was Brutus and Brando was Marc Antony, you must have peeked. (Esquire, April 4)

Macbeth, directed by Polanski, with Jon Finch and Francesca Annis. If my memory serves, this was one that Playboy magazine was involved in I haven't seen it. (Esquire, April 14.) [Ed. note: It is indeed the Playboy Productions version, and the nude scenes may come as a surprise to the Pasadena City Schools teachers bringing their classes.]

A Midsummer Night's Dream, Peter Hall directing, with Diana Rigg. That's not the only kind of dream. See it. (Esquire, April 25)

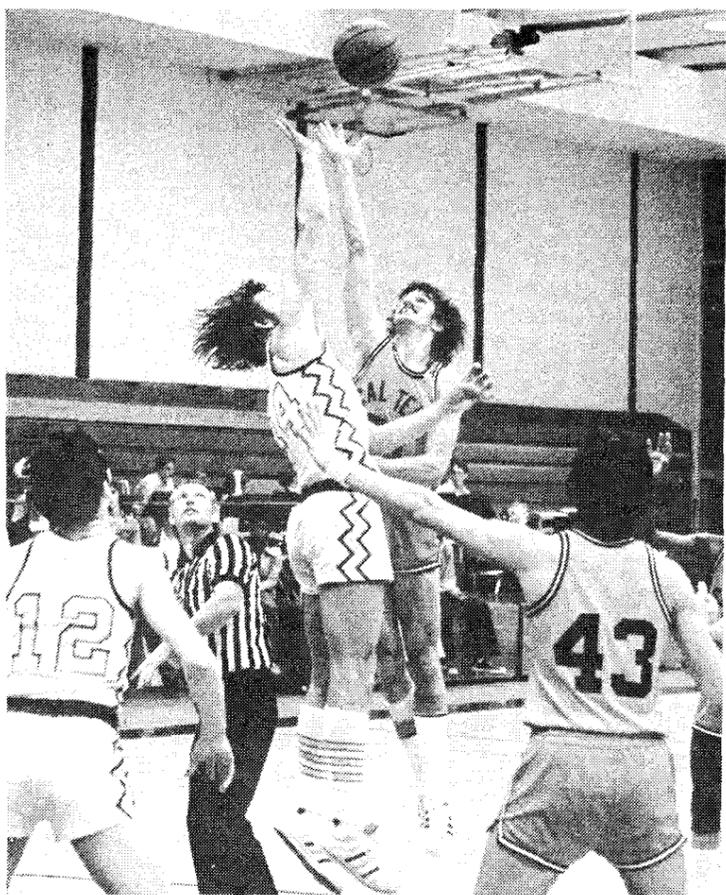
Henry V, with Olivier, of course. A classic.

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Photo—John Loo

Tech basketball player losing tipoff to Cal Lutheran opponent.

Cagers Fight Back, Still Lose to Cal Lutheran

by Rock Howard

It was halftime at Cal Lutheran's gym. The Beavers had played well, but still found themselves on the short end of a 67 to 29 score. Tech's luck had been abysmal as time and again their shots rolled off the rim. While the Kingsmen of Cal Lutheran were inflicting physical punishment on the Beavers, most of the personal fouls were being called against Tech. With memories of a previous loss to Cal Lu of 106-54 in the back of their minds, the Tech squad knew there would be no let-up in the second half. A team with less pride or spirit would have simply gone through the motions the second half. Not so for this determined Caltech team.

Blaisdell won the tip to Pender who drove in for a quick Tech bucket. Peter Edwards then hit a pair of 15 footers and Bart Croes connected as well. As the Kingsmen were forced to come out and play the guards, the center opened up for Joe Zasadzinski who reeled off Tech's next nine points. Meanwhile, Tech's defense was alert and its rebounding was crisp.

Soon everyone was hot for the Beavers. For a change the players were having a lot of fun and performing at their peak. Three Beavers fouled out, but the replacements filled in ably

for the departed players. When the final horn sounded the Tech squad had much to be proud of. They had matched Cal Lutheran's excellent first string point for point for 20 minutes. They had poured in 51 points in the second half. They had shot 50% from the field during this time. Most importantly, they had proven to themselves just how well they were capable of playing.

The next Tech game was against the Ambassador Royals. Unfortunately, the team didn't pick up where it had left off in the Cal Lutheran game. Once again, cold floor shooting was to be Caltech's demise as only 33% of Tech's shots went in. Only John Pender got hot for the Beavers as he hit 21 points to lead both teams. The only other Tech highlight was a breakaway dunk by Greg Blaisdell. The final score was 72-46 for the bad guys.

The JV lost both of the preliminary contests last week. Cal Lutheran won 121-31. Bob Burke scored 9 points and John Hattick hit 8. Ambassador won their contest 78-32. Doug Brandt, John Loo, and John Hattick each mustered 6 points.

Caltech will get to play its first home game this year tomorrow against Pomona Pitzer. The JV game starts at 6 p.m., while the varsity contest begins at 8 p.m.

Tech Wrestlers Defeat Cal Lutheran

by Dan Gobble

On Wednesday, January 12, the Caltech Wrestling team showed its spirit and ability. The team did not just beat Cal State L.A., but all of the Tech grapplers won their matches. Freshman Dale Ota scored a superior decision at 134 lbs., and freshman Dave Marcadis and senior Chris Russel both pinned

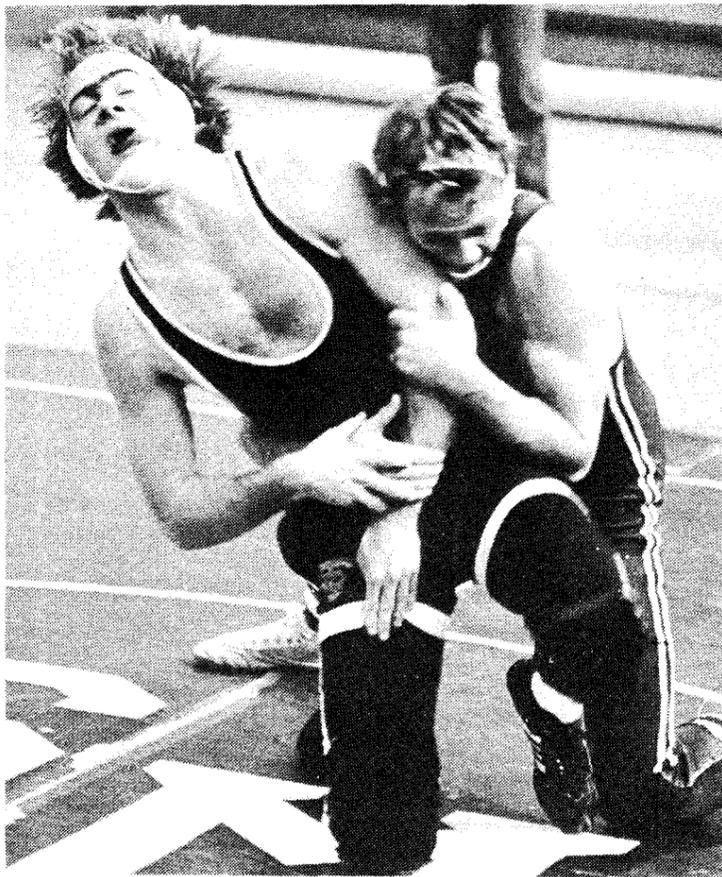
their men at 177 and 158 pounds, respectively. The final team score was Caltech 28, CSULA 12.

The Caltech Invitational Wrestling tournament went to Biola this year. Caltech finished tenth out of the thirteen teams that competed. The Tech team, points were scored by junior Tom Snyder and freshman

Mark Fortunato. Snyder took fourth place at 167 pounds.

On Wednesday the 19th Caltech took on the Pomona Stagghens. Although it was a loss for the team, there were several well-wrestled matches, including a pin by senior Bob Loveman. Today, Caltech takes on Claremont-Harvey Mudd at Claremont.

caltech
sports



Photo—John Loo

Tom Snyder takes firm grasp of his opponent Cal Lutheran match.

Leather Balls?

Caltech Students, Faculty Join In Rugby Upset

"I had heard the rugby was organized mayhem," recalled a San Diego Police patrolman "but after seeing it today, I think it's just mayhem."

Saturday in the San Diego Invitational Rugby tournament, our local team, the Crown City Rugby Club, accomplished a major upset by defeating the Old Mission Beach Rugby Club 8-7. Crown City is composed of Caltech students and faculty in addition to non-institute personnel, and has Caltech as

home field. Professor Mo Fiorina of the Humanities division was instrumental in Saturday's game with a timely tackle. Runner Carl Davis was also impressive.

Graham MacVerry and Prof. Bob Forsyth are expected to contribute to the team's success this year, along with Caltech football captain James Moore.

Those interested in joining the team are invited to attend practices Tuesday and Thursday evenings at 7:15 out on the CIT football field.



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