

Techers to Demonstrate Artistry at Paint-In

Saturday In Dabney Garden

by Phil Neches

Reliable rumors report that Harold Brown, the soon-to-be-sworn-in President of the Institute, lamented the lack of imaginative, artistic decoration on the fence around the Baxter Humanities Building. Taking the criticism to heart, the Art Program, the Dean of Students, and the Master of Student Houses have arranged for the one

and only Harold Brown Inaugural Paint-In.

Art materials, consisting of 4' x 8' masonite boards and paints, will be provided on Saturday, October 25, starting at 1 p.m. to any person or group wishing to create an art masterpiece to grace the construction fence on the Beckman Mall. The masonite boards are for safety: unfortunate incidents in the past point up the dangers of painting directly on the walls of the construction site.

Loud Wild Band

To add spice to the event, live entertainment will be provided by

what Dr. Smith bills a "loud, wild rock band" starring Tech's own Walter Gish, who has recorded with Jefferson Airplane. As more of the fun, Scripps and Pitzer may appear to challenge the artistic prowess of Tech by creating a masterpiece of their own. Refreshments will include soft drinks, cookies, and perhaps more, as the icing on the cake.

Judging will be conducted, with the results to be published or not, depending on the condition of the judge(s) after viewing the budding Da Vincis and Michaelangelos at work.

Local Color splashed

All persons, houses, groups (recognized or otherwise; formal and informal) are encouraged to participate in this activity which will certainly add a little local color to Tech. Any style, concept, or design will be encouraged, but please remember that the best works will be displayed during Harold Brown's inauguration. So whatever your artistic bag is, pop, op, dada, surrealism, expressionism, impressionism, abstract, abstruce, or whatever, come to the Paint-In and join the fun. Bring your friends, dates, models, etc.

NOTICE

IF YOU ARE INTERESTED IN COMPETING IN THE PAINT-IN, CALL DAVID SMITH AND TELL HIM THAT YOU ARE COMING—
MASTER'S OFFICE, X2195



—photo by Belsher

The list of war dead is read at the moratorium as passersby watch.

BOC Feedback Meeting

Fisher on Honor System

by Bob Fisher
Sec'y BOC

The Honor System is currently the focus of a good deal of discussion here on campus. While this is, in itself, quite beneficial, it would seem that there are more effective ways to conduct a dialog than through the Tech.

The BOC does not assume that it is the sole caretaker of the Honor System. Nor do we feel defensive about a particular body of doctrine. As individuals, we, on occasion, disagree with precedents set down by previous Boards. There are others, and we feel that it would be

helpful to us to have a chance to talk them over with the Student Body at large. The Board will make itself available for this purpose at 8:00 PM on Sunday, October 26, in Clubroom 1.

We also hope to get some feedback on the broader questions of academic and non-academic violations -- should the Honor System have separate mechanisms for each of these -- and on "due process" -- are the procedures of the BOC just, effective, and legal.

In addition to the open meeting on the 26th, the House Reps will be holding discussions within their respective houses.

The CALIFORNIA Tech

Volume LXXI

Pasadena, California, Thursday, October 23, 1969

Number 5

Talks, Construction, Films Mark Moratorium at Tech

by Dave Dixon

On Wednesday, Oct. 15, Caltech participated in the National Day of Moratorium on the Vietnam War. Many people from Caltech and the community participated in the Moratorium as over 1000 black armbands were distributed to commemorate those killed in the Vietnam conflict. Also, during the

day there were over 500 people at one time centered around the main speaker's platform outside the bookstore.

The stated purpose of the Moratorium was to think about the Vietnam War. For this occasion many professors cancelled classes while some held discussion in class. During the day over 300 postcards

against the war were sent to President Nixon while about 1000 signed the following petition:

"We, the undersigned, declare that this war must end promptly. We petition the Pasadena City Board of Directors to call upon the President of the United States to withdraw all American Military personnel from Vietnam immediately, or certainly no later than December 1, 1970."

During the day much activity centered on the building of the Moratorium monument and on the reading of names of those killed in Vietnam. The construction was to symbolize the differences between war and peace and to be a reminder of the continuing conflict in Vietnam.

The day began with the reading of the names of the dead and the building of the symbolic cemetery. Later during the morning came a short set by the D.S. Blues Band. Then the morning's speakers came on being introduced by Dr. Rosenstone, history professor at Caltech. The three speakers were Robert Vogel, from the West-coast Peace Education of American Friends Service Committee (AFSC), Joh Lee, Vets for Peace, and Stanley Kohls, draft resistor. After the speakers came five films of which the one visited by most

YMCA Sets Program

by Bob Fisher

Now that October 15th has passed, I thought I might reply in somewhat organized form to the question of what the Caltech YMCA will be doing in the coming year. Our planning conference brought out three new areas of programming we want to cultivate.

1) Sex and dating. This would deal with issues as broad as the role of sex in a university society and as basic as the best approach to ask for a date. Basically participatory in nature (not too participatory!), the

series would comprise talks, films, seminars in the Houses, a one-day sex conference (utilizing psycho-dramatic and role-playing techniques), a Couples Weekend, and others. The group is under the able chairmanship of Bob Fisher and will be mobilizing at a meeting Wednesday, October 29, at 4 p.m. in the Y Lounge.

2) Psychology Today. There has been strong interest in another program such as our "Journey Into Self" series of last year. Psychology Today is envisioned as being somewhat similar, but broader in scope. It plans to examine the

Continued on page three

Continued on page three

Delbrück Showered With Telegrams

Dear Tech,

Congratulations on a terrifically nice and speedy job with the Extra Number 4½. It was a very friendly thing to do and I appreciate it. In return I am sending over a selection of cables and letters in three categories: (1), the grand (from Richard Nixon, Robert H. Finch, Lee A. DuBridge, Andrew Cordier)—none from Reagan (lost in the mail?); (2), the pompous German ones, perfect for German exams (Mayor of Cologne, Prime Minister of Land North Rhine Westphalia, Rectors of the Universities of Cologne and of Konstanz); (3), the personal ones—the best of these I consider those from Art Cherkin, "Now will you get a new bike?"; from friends at Vanderbilt University, "Vanderbilt now willing to offer you full professorship in biology"; from friends in Switzer-

land, "Do genes carry also Nobel qualifications?"

Cordially yours,
Max Delbrück

Telegrams Of Congratulation

Dr. Max Delbrück,

My sincere congratulations on the award of the Nobel Prize in Medicine to you. This is a richly deserved honor. Best wishes.

Lee A. DuBridge
Science Advisor

Dr. Max Delbrück,

Congratulations to you on receiving the Nobel Prize in the field of virus research. Increased knowledge in this field is certain to enable great strides in our future

efforts. Your fellow scientists—and all mankind—are grateful to you for the dedication that made your achievement possible. And your fellow Americans are proud of the honor and distinction you have brought this nation.

Richard Nixon

Dr. Max Delbrück,

My sincerest congratulations on your outstanding contribution of new knowledge to the field of virus research recognized today by the Nobel Prize Committee. Increased understanding of viruses will expand the opportunities for a number of our programs to advance in the years to come, and the people of the world will be the ultimate benefactors.

Robert H. Finch
Secretary of HEW

HARPER'S BIZARRE

OCTOBER 30

TICKETS AVAILABLE FOR
DINNER AND CONCERT
FROM HOUSE SOCIAL
CHAIRMAN AND BECKMAN
AUDITORIUM TICKET OFFICE

TWILIGHT BUFFET

Editorial

Enough Is Too Much

We were overjoyed at the news last week that the Trustees have decided to admit women next year. This announcement marks the official end of the long struggle to bring coeds to Caltech.

However, we were not overjoyed at the way the Trustees plan to bring the women in. The women will be admitted in addition to the regular male admissions. Apparently, the Trustees are trying to increase the undergraduate enrollment by this method. We consider this to be extremely ill-advised.

To begin with, the unusually large freshman class this year has brought the Student Houses perilously close to being overcrowded. The addition of 25 more students in the houses will make the situation critical.

As a result of the overcrowding which would follow any increase in undergrad enrollments, many students would be forced to live off campus. Life in the student houses is one of the most interesting aspects of life at Caltech. The opportunity to live in the houses should not be denied to anyone who wishes to enjoy (endure?) it.

Finally, if the houses (particularly the new houses) are crowded further, most of the upperclassmen will be driven off campus. This will result in a deterioration of the quality of student house life. It is the upperclassmen who maintain the character and traditions of each of the student houses.

In short, we believe that the undergraduate enrollment should not be increased at this time. Women should be admitted as a portion of the regular admissions quota.

-Craig L. Sarazin

The Right View

Ochsner Signs Off

To the students, faculty, administration and associated personnel of Caltech:

This is the last Right View column.

Most of you who read this were connected with the Institute in the 1968-69 school year. And probably many of you at one time or another read one or more of my columns.

Undoubtedly, the majority of the student body were in total disagreement with what was said. There were a few who could agree with much of what was stated, although it is doubtful whether anyone could ever be in total agreement.

The purpose of the Right View was to provide an alternative—to educate. To some degree at least, I believe it succeeded.

To those who sent me encouragement and thanks at the end of the

school year and during the summer, I reply with my thanks. To those who sent me letters of ridicule, or of thoughtful disagreement, I must also offer thanks. For from these as well I was able to judge the success of The Right View.

To those who offered suggestions for future columns, or ideas which might be incorporated, I am again grateful, but I cannot comply.

The Right View will not be continued this year.

At the end of the last school year I left the Institute in order to enter the Rice University School of Architecture. That is where I am presently enrolled.

I am requesting that the editors remove the byline, The Right View, from current use, to be ended with this column.

To all who read the column, at least once, my thanks.

Yours very truly, Jeff Ochsner

Letters

Kapitsa Lecture Stirs Debate

To the Editor:

Regarding last week's letter and the following paragraph: it seems surprising that a misrepresentation could have occurred in the same column; evidently some explanation is in order.

We did not state that an individual was responsible for the actions of his government (a notably collectivist sentiment). He is responsible only for his own actions, and in the case of Dr. Kapitsa, these are exactly what we object to. A scientist's responsibility does not end with rigorous adherence to fact in his work; it includes what that work will be used for, to the best of his ability to determine that, particularly if no one else could have done it. Dr. Kapitsa works for the Soviet government and has of his own volition put into their hands results which have been used to further the cause and increase the efficiency of the Soviet reign of terror and aggression. An example is the advance in liquified gases cited in the introduction to his lecture in 201 Bridge: this advance, it was said, has greatly aided the missile program. Please recall where those missiles are aimed. Whatever his conscience says, he has in fact worked for the destruction of freedom.

This is the reasoning behind the opinion expressed. Note that a moral judgment is not the same as a trial and can be valid in abstentia. We believe that the position taken by the Institute in inviting Dr. Kapitsa was to sanction the science-ethics dichotomy by showing no regard for the polar difference in ends served by the work of the Institute and that of Dr. Kapitsa.

Lawrence Rhodes Terry Boardman

Editors' Note— We thoroughly agree with Messrs. Rhodes and Boardman in deploring any action of any individual which harms the cause of freedom. Here agreement ends. These gentlemen obviously believe that we are right and they are wrong, and Dr. Kapitsa, as one of them, should be condemned. See the "polar difference" referred to above.

We remind these gentlemen that many Caltech scientists work for our own government, of their own volition putting results used to further the Pentagon's goals in the hands of our government. Is this a "polar difference?" It sounds the same to me. Nuclear bombs or bacteriological warfare look the same no matter who is using them, and remember we were the ones who pioneered them. We, the United States, have admitted to stockpiling enough chemical warfare weapons to destroy the world several times over (isn't once enough), and how can this possibly be used as a defensive weapon only? We are doing this. That is what we meant by, "Let him whose country is without fault cast the first stone."

In all likelihood the Russian government is a far more effective agent against freedom than our own. Nevertheless, we maintain that the difference is one of degree, not kind. Our missiles are aimed at them just as surely as theirs are aimed at us. The object of our notes is not to cover the "evil" in Dr. Kapitsa, but to refute the pure good-and-evil dichotomy which excludes the middle ground in which, we feel, all such situations truly lie.

Lowe Questions Lack of Full Inaug. Holiday.

Dear Sirs:

A few days ago, I was among several in our House who were speculating as to the possibility of a four-day weekend commencing with Dr. Brown's Inauguration on Thursday the 30th. However, I have recently learned that classes would be cancelled only during the morning of that day and that afternoon classes would be held at the discretion of the instructor. It being a holiday, with special events scheduled for the evening as well, it would appear most opportune, in view of the impending weekend, to declare Friday a holiday as well and institute, on this occasion, a four-day weekend.

Moreover, such a respite from classes may provide to many students a choice opportunity to prepare for the mid-term examinations to be held for the week of November 3 to 7. I would hope, therefore, that the possibility of the Friday holiday be seriously considered by the Administration.

Sincerely yours, Yorkman Lowe

Dear Tech,

I had hoped I could write this letter suggesting a student vote on the future of the tank and accompanying articles constructed on Oct. 15. Unfortunately, again I am disgusted by the actions taken by a few students. The burning of the construction sign Saturday night (Oct. 9) and the spraying of the signs on Tuesday night certainly were disgraceful acts, but now I am confronted with an even more shameful action, namely the robbery of the tank and associated articles on Saturday.

As I understand it, approximately 20 persons from Page House did this in the form of a prank, at least I hope it was intended as only a prank. Even so, if the majority of these individuals did this as a prank, then it is a symptom of a disease that afflicts the undergraduates. The disease makes life into a game and a joke. There is nothing wrong with enjoyment, fun, but constant light-heartedness can only result in a loss of the total spectrum of life.

The inability of a majority of these individuals to recognize the seriousness of the tank and what it stood for to other persons exemplifies this affliction. I hope they now realize the injustice they have done.

As the Tech goes to press, I am planning to have a meeting with concerned students Monday night in Winnett to get students feelings. Then, later, to have a discussion between part or all of those that came on Monday night and those responsible for the prank.

Anyone who wishes to express himself on this matter may put a note with a room or phone number in the "D" mailbox in Lloyd House.

-Dennis DiBartolomeo

To the blind fresh minds:

This campus has lacked the qualities counted rare on earth called: compassion, concern, unselfish feeling. The Institute fills its value; higher education and trolling. The students, however, as the potentially most productive student body on earth, is unfortunately and uninterestingly funneled into the grade bureaucracy and science. Business is not productive - why are you not productive now, what a small percentage of Techers achieve interesting concerns while in there tenure.

When I read concerning criticism of Kapitsa; I suddenly to realize that people have been so uneducated as not to understand that our ignoble science is the only bulwark to remain partially unscathed by political hate. If it wasn't for propaganda—our space efforts might be united. People have such interest in them individually - I was really struck by Dr. Kapitsa's special clever and refreshing nature. Maybe his topic wasn't earth-shaking - but it was fun and interesting and I was broadened.

-Demos

[sic]

PAT'S LIQUORS AND DELICATESSEN 1072 E. Colorado SY 6-6761 Open to midnight daily, 1 a.m. Fri. & Sat. Keg Beer Party Supplies

welcome to the Campus Barber Shop in Winnett Center Three Barbers to Serve You 7:45 to 5:15 Monday - Friday Paul A. Harmon

The CALIFORNIA TECH Volume LXXI Number 5 Thursday, October 23, 1969

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Photography: Steven Dashiell, John Bean, Alan Stein, Paul Levin, John Belsher, John Fisher

Staff: D. C. Agnew, Bruce Britton, Dave Dixon, Bob Dullien, Bob Geller, Roger Goodman, James Henry, Alan Lederman, Phil Neches, Richard Peterson, Jon Post, Etaoin Schroedlu, Martin Smith, Mike Stefanko, James Wei

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VOTE ASCIT ELECTION WED., OCT. 29 for class offices and IHC Chairman. INSTITUTE CALENDAR If you'd like an Institute Calendar delivered to you, write a note or go in person to 4 Throop (Public Relations). STUDENT DARKROOM For keys to the student darkroom, contact Fred Klein, darkroom chairman. CALCULATOR ROOM For keys to the calculator room under Blacker House, see Bob Gray. APPOINTIVE OFFICES Apply to any BOD member if you're interested in one of the following: 1969-70 Big T Bus. Mgr., 1970 little t Editor, Elections Chairman, Totem Editor or Bus. Mgr., Secretariate member.

EDITORIAL POLICY The opinions expressed herein are solely those of the writers under whose by-line they appear. Only the upper left hand portion of this page represents the editorial opinion of the CALIFORNIA TECH and the undersigned writers. All letters received by 6:00 p.m. Monday evening will be considered for publication on a FIRST COME, FIRST SERVED basis; the CALIFORNIA TECH reserves the right to cut letters to a maximum length of 300 words if the context of the letter can be preserved. We disclaim all responsibility for errors in editing, printing, or timing of the letters received and/or printed. Letters received from off-campus as well as all stories will not be returned. -The Editors

LETTERS TO THE EDITOR See editorial policy at left for information on letters to the editor. Please try to have letters in by 6 p.m. on Saturday. NOTICES Notices to be inserted in the CALIFORNIA TECH should be submitted on the form provided outside the TECH office in Winnett. Notices should be in by 6 p.m. on Saturday.

“Fourth?”

by Robert Geller

Most bridge players tend to underestimate the importance of part-score hands, particularly at international match-point team-of-four scoring. Today's hand, played in a team match at Bob's Bridge Club at 779 North Morengo, demonstrated that significant swings can be generated on part-score hands. The games at Bob's, incidentally, are run by Bob Deedrick, a man with the refreshing idea of offering cash rather than master-points as prizes. For only about two dollars a session you can play against players like Clark Meritt, the San Gabriel Deuces and Bob McDonnell. Team games are something that every bridge player should try at least once, especially when Mr. Deedrick is running the game.

Very bad judgement was shown by both North and South in the bidding. North was just begging his partner to get his partnership into trouble when he overcalled on such a balanced hand with a sub-minimum high-card structure (at his vulnerability). Obliging, South promptly overbid his hand with his one spade bid. He should have had the good sense to realize that his diamond king was not an especially useful card. North completed his ruin with his raise. He should have decided that one bid on his hand was enough.

Killing Defense

Surprisingly the North-South bidding was duplicated at the other table, where North-South played in two spades making three. This North-South pair, though, was unlucky enough to receive good

defense. West, having no really good lead, started by underleading his ace of clubs. South really had no way of telling what West had done and played low from the dummy. East, who was quite surprised to win the trick with his queen retained sufficient composure to return his partner's bid suit. After taking his two diamonds and the ace of clubs, West decided that the defense's best chance was to try for two heart tricks. After cashing the ace of hearts for the setting trick East led another heart. South guessed wrong by ruffing with the nine and went down two. The swing to West's team was seven international match-points, or more than the swing for making a non-vulnerable game when the other table is in a partial.

North	
S A 10 5	
H Q J 9 7 6	
D J 7 2	
C K 5	
West	East
S J 3	S 8 7 2
H K 8	H A 5 3 2
D A Q 10 8 4	D 9 5 3
C A 9 7 3	C Q 8 2
South	
S K Q 9 6 4	
H 10 4	
D K 6	
C J 10 6 4	

North-South vulnerable
The bidding:
West North East South
1 D 1 H Pass 1 S
Pass 2 S All Pass
West led the seven of clubs.

YMCA Program

Continued from page one

different kinds of psychology and psychotherapy in current favor and disfavor. A planning group on this is gathering Monday, October 27, 8 pm. in the Y Lounge.

3) Crises in Higher Education. Again, not exactly a how-to-do-it course, Crises would focus on the issues of student power, California politics, and the relevance of our teaching institutions. It has been suggested that the program include a "University Game" like the PME but in a university setting. Monday, October 27, at 4 p.m. in the Y Lounge will be the first meeting of this group.

In addition to these so called "Blockbusters," we will continue with our regular activities. Included among these are our Thursday Grad

Sack Lunches, our Wednesday Athenaeum Luncheon Forums (which hosted Gene Showmaker's remarks on the space program), and various seminars in Winnett or talks in the Olive Walk.

SCAR, an acronym for Students Concerned About Racism, is continuing the work it started last term. More will be heard from them later.

The Political-Military Exercise is alive and well under the iron fist of Bob Jackson in Blacker. It, too, will soon be organizing.

One last area which deserves special attention is our Encounter Program. Two conferences are scheduled for first term: A Leadership Lab on November 8-9 and a Basic Encounter Lab over Thanksgiving. We are working hard to build up resources among the students and faculty for an expanded program in succeeding terms.

Kapitsa Lectures on Ball Lightning

Dr. Pyotr Leonidovich Kapitsa is considered the most eminent Russian physicist for some very convincing reasons, as he proved last Monday in a lecture in 201 Bridge. Standing room only conditions prevailed, as students and faculty jammed in to hear the 75-year-old "Dean of Soviet Physicists" lecture on ball lightning.

Ball lightning, Dr Kapitsa said, is a ball of hot, ionized gas which can penetrate stone chimneys and ends in an explosion which generates a great deal of heat and light. Dr. Kapitsa had speculated that an ordinary lightning stroke acts as a wave guide for a train of microwaves, which provide the energy input for the lightning ball.

Shocking Results

To test his theory, Professor Kapitsa used chambers filled with helium placed in microwave cavities. With powers ranging from 1 to 15 kilowatts, Dr. Kapitsa and his co-workers produced brief discharges which were highly similar to ball lightning. They also found that the addition of impurities (they used some acetone with the helium) resulted in a considerably brighter discharge, and that, with sufficient power, the lightning ball had an inner core of plasma.

High Intensity Stroke

Investigations in the Caucasus Mountains by 10 or 15 young scientists working under Dr. Kapitsa verified many of the laboratory results, but several fundamental questions remain unanswered. When asked what was the mechanism by which a lightning stroke produces the high intensity microwaves needed, Dr. Kapitsa replied that the hot ionized gas produced by the lightning stroke created a resonance condition, then he said that it makes an interesting problem for



Dr. Kapitsa talks shop after his lecture last Monday. —photo by Fisher

the theoretician. On being pressed further, Dr. Kapitsa said, "If you know for certain, it's no longer science."

Winning Wit

That response is typical of Dr. Kapitsa: he has a quick and warm wit, and a winning style of lecturing which, even with the difficulties of lecturing in a foreign language, infects his listeners with enthusiasm.

After the lecture, I spoke briefly with the Professor. He said that the political rivalries between our two nations should not impede common pursuit of scientific knowledge and indicated that he was sorry that he could not make it to the Student Center as was planned. Dr. Kapitsa symbolizes the hope that whatever the political situation, man can progress by cooperation.

This has been a sketch of what things are currently in the works. We are still very much open to suggestions, and in fact solicit them actively.

For convenience, each of the meeting times are summarized below. All of them are open and scheduled for the Y Lounge.

- Crises in Higher Education—
Monday, Oct. 27, 4 p.m.
- Psychology Today—
Monday, Oct. 27, 8 p.m.
- Sex and Dating—
Wednesday, Oct. 29, 4 p.m.

Moratorium

Continued from page one

people was "The War Game," a powerful BBC film on atomic war.

During the time that the films were being shown, five discussion groups were being led by a variety of Caltech professors. All were well-visited and most of them were successful in bringing out many ideas. These groups were: draft resistance, moral issues and history of the American involvement in Vietnam, end the war, social responsibility of the scientist, and open-end discussion.

Then came another battery of speakers, led by Jeremy Lerner, a McCarthy speech writer and Dr. Lester Lees, professor of aeronautics at Caltech. After these speakers there was an open-mike so that people could present personal views to the collected people.

The Moratorium then broke up with many small discussion groups and with future plans to continue the Moratorium with the November 15 march in San Francisco and by having more speakers on campus at this time.

The Coffeehouse

Coffee

Open

Sundaes

Nitely

Soda

9:00 PM

Hamburgers

- 2:00 AM



At the sign of the turtle

1101 San Pasqual

Near Wilson



OH BOY!

for all you anxiously -
waiting upperclassmen:

~ The Big T ~
IS COMING !!!

The Bore's Head

by Nick Smith

One kind of pig is reputed to hit people over the head with clubs. Another kind hits people with music. The latter kind of pig is called Blodwyn Pig, the name of a new group featured at a special concert given by A&M Records last week.

Blodwyn Pig is to Cream, but they did show quite a bit of talent and versatility in their set. They did a Chicago blues-rock called "It's Only Love" followed by a blues number that reminded me of "Little Red Rooster" by the Stones. "The Modern Alchemist" featured a great tenor sax with a jazz-rock tune flowing around it. "A Change" was

just that, with a simple country-folk beat (my last hyphen, I promise) and played with only a violin and accoustical guitar for accompaniment.

I was greatly impressed with the saxophonist, who also played flute, clarinet, and an angular thing I've never seen before. The guitarist showed flashes of excellence, as did the drummer, but both were forced to fight a peculiar p.a. system. The kindest thing that can be said for the speakers is that they stopped humming when kicked. Personally, I can hardly wait to hear their album, and I think that they may be what is needed now: a really good group that isn't just a super session.

Classified Faculty?

Guibas Writes on Faculty

by Leonidas J. Guibas

I believe it is possible to classify faculty at Caltech as follows:

1. Those who like to do research.
2. Those who like to teach.
3. Those who like both.

It is my impression that the first class out-numbers by far both the second and the third. I attribute this not to any intrinsic superiority of research as opposed to teaching, but solely to the fact that in the academic community all prestige and awards are associated with competence in research. A professor's status, salary, and promotion opportunities depend heavily on his publication record. Under this well established system of values it seems only natural to consider teaching as inferior work.

The present state of affairs is harmful to undergraduate education, particularly to the underclassmen. An immature but intelligent young man can easily, on his own or with minimal help, acquire a collection of disconnected facts and ideas. But true education goes beyond that—it involves organizing these disconnected elements into whole and being able to distinguish between the useful and the useless, the true and the false. This ability is largely the result of experience, advice and trial and error. The only way for a student to acquire this ability without going through innumerable blind alleys is personal contact with one who already possesses it. This kind of contact is lacking between the faculty and the undergraduates. Thus, the inadequacy of the Graduate Teaching Assistants as instructors, the failure of large-size classes. Thus, the complaints (from both sides!) against the advisor system; a student sees his advisor only when he needs his cards signed.

In this atmosphere teaching ceases to be an interpersonal relationship. It becomes a cold presentation by the instructor with only passive participation by the student. In many courses I have attended students hardly ever speak; moreover the material is often so advanced that the student, within the time allotted to the course, can barely keep up with the pace set by the instructor. The justification for this being that the most material must be covered in the least time so as to permit the student to arrive at the exciting new frontiers of research. If the aim, however, is to turn young people here into creative adults, some attention on the method of discovery need also be paid. It is important to realize that past knowledge was also once unknown and then discovered, and for the student to spend some time

retracing on his own the steps of a past discovery is good practice for a new one.

Therefore active participation by the students in the classroom is necessary. It is necessary for building independence of thought and for learning the technique of presenting one's ideas in a form comprehensible by others. It is much easier to fool oneself when one has only oneself to face. The French mathematician Lagrange used to say that he did not trust he understood something until he could present it in terms that were intelligible to the man in the street. In this sense a number of students here do not understand what they learn.

As a consequence of the above I advocate the following reforms and changes. I believe all are feasible at Caltech because of the small size of its student body. Both the faculty and the administration should emphasize teaching. Higher prestige, status, and salary should be associated with teaching. Prizes should be established for good teaching. I understand that these can only be long range reforms. In the short run, emphasis should be on active learning by the students. Abolish routine problem solving courses; organize them more along seminar lines; let the level of difficulty be best determined by the abilities of the class. Try to make students and teachers interested in each other as human beings. Require instructors to spend some time individually with each student. Establish effective channels for the handling of complaints from both sides. Require from the students the ability and self-confidence to present their ideas in a finished and comprehensible form, and the ability to support them. In other words, make the students value their own thoughts instead of blindly accepting what is given to them. Furthermore, make them able to communicate these thoughts. Due to the immense amount of information one has to cope with in today's scientific world the importance of the above abilities for creative work cannot be overstated.

Here, I end as abruptly as I started. The above are only raw, incomplete thoughts and refer only to a part of the whole question of academics. It is also probable that I have been exaggerating at times. But I want to graduate from this School with the conviction that what I attended was not a Research Institute but a School. I want to believe that what it gave me was not elbow room but room and training for my mind.

Only Hollywood Knows for Sure

Lillian Gish: But Is It Art?

by Alan Lederman

In this age of packaged goods, theater-goers are being exposed to an increasing volume of packaged entertainment. These typically are marketed by large Eastern agencies and distributed throughout the country. The quality of these packages is very often low; an example in point was the package called *Lillian Gish And The Movies* presented Saturday at Beckman Auditorium.

Miss Gish was perhaps the leading American actress during the birth and adolescence of American cinema, from 1910-1928. She worked with D. W. Griffith, and was

familiar with the significant figures in cinema at that time.

Reminiscance

I envision that an executive at Entertainment Media, Inc. had asked himself "Why not borrow Lillian Gish from artistic oblivion, and package a film program with herself as narrator. Everyone enjoys old movies: many over-65's will pay to see her and reminisce. And with the new interest in cinema as an art form, we can include some technical detail and attract some young people as well. And some middle-aged people will come to be entertained. General appeal. After all, we're in this business to make

money." To make money, not to create art.

Overpretentious and disorganized, Miss Gish fell into the trap set by the nature of her task. She was placed on a lecture stage and forced to read a script and narrate movie excerpts wholly inadequate to fulfill its purpose: that of relating personal experience and technical details in an entertaining mode.

Personal Experience

The forte of Miss Gish was personal experience. She knew D. W. Griffith, Charlie Chaplin, and Mary Pickford, among others. One must assume she could have provided us with a very interesting set of insightful recollections. Instead, were given a series of one-line, disconnected bandities. For example, the great insight into Mary Pickford's career was when we were told she had adopted a stage name.

But the lecture was a commercial product; it had to entertain its audience. This was done by means of film shots chosen primarily for superficial audience enjoyment. Unfortunately, by implication these shots were not the most revealing in terms of personal experience, nor in terms of historical significance, nor in terms of technical information. In fact, despite a plethora of Keystone-Cop type trivia, the most significant film of adolescent American cinema, Griffith's *Intolerance* was not shown at all. Needless to say, this placed Miss Gish in the unenviable position of standing by a screen, having nothing to add of value, as the audience giggled pointlessly.

No Technical Interest

Although apparently Miss Gish knew of the technical aspects of film and cinema, she mentioned these hardly at all. She limited herself to such urgent details as the salaries of extras in various movies, while neglecting the development of print techniques, closeups, and use of illusion.

One can see that Lillian Gish is forced into this awkward position by the nature of commercial programming. But we cannot exculpate her. For the distribution of the Beckman audience was skew strongly towards the social security set, the set that came mainly to reminisce and to be entertained, not informed. It must be obvious to her now that the script she reads so mechanically is inconsequential. She should realize nothing but her physical presence, like some wax figure of sentimental value, is all her older audience desires. But does she or doesn't she?



Universal Studios' "Oktoberfest International" featured a beer drinking contest and the photo shows the final, championship event. Tech's team is on the left and finished 7 seconds behind the others, a group from a club in Santa Monica.

Do You Want Teacher Education in Your Schools?

In a move to create a new program of teacher education at IHC, a brainstorming conference has been set up for the weekend of October 24, 25, and 26. The conference will feature a presentation by Dr. Dwight Allen, Dean of the School of Education at the University of Massachusetts.

The session will begin Friday evening at 8:15 with Dr. Allen's address. Saturday and Sunday will be devoted to small group work sessions composed of students and faculty from IHC.

Three...Two...One...Zero

The conference is an outgrowth of preliminary planning aimed at launching a new form of teacher

education in the fall of 1971 on IHC's new campus at Claremont. Most of the original ideas were formed in informal discussions with students in relation to their own personal learning experiences. This basic study has been progressing during the past two years. It is hoped that the conference will synthesize these and other ideas into usable, new approaches to the development of teachers.

Anyone interested in attending or wishing more information should call 462-1301, extension 230, on Monday, Wednesday, or Thursday, or extension 294 on Tuesday and Friday, or should contact John Bean, in Room 29 Dabney.

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Dan O'Neill
D
BODKINS



Guibas Travels On

continued from last week

by Leonidas Guibas

Below is the main body of a letter I sent to Dr. J. H. Richards, chairman of the faculty travel prize committee, thanking him for the committee's financial contribution to my travelling expenses this past summer.

[continued]

In France the situation is quite different. Actually I can speak only of Paris because that is the only city I stayed in. All three schools I visited were inside the city, at the Quartier Latin. Although impressive buildings they were not particularly beautiful. Only formal instruction is given at these schools; students have to accommodate themselves either independently in the city or at the Cite Universitaire, a huge complex of dormitories quite far from the schools. At the time I was there the schools were not functioning, but in the papers there were often reports about reforms in higher education. These reforms were originated after the events of May 1968 (incidentally there still are numerous policemen in the streets around the universities) by Mr. Edgar Faure, De Gaulle's education minister. They consist mainly in the following: 1) the creation of multidisciplinary universities; this a wide turn away from France's overspecialized higher education. In this country a student has to decide from high school what field to go into. Elective courses within one's option as well as opportunities to take courses given by other options are almost nonexistent. Against this curricular inflexibility and rigidity Faure proposed the creation of universities much more like the American ones, where one has a great deal of freedom regarding his studies. The goal of higher educa-

tion should be to provide well rounded men as well as well trained scientists. 2) The participation of students at the running of the university. It is now commonplace in France to attribute a large part of the cause of the May events to the frustration with which students met in their attempts to bring about changes in their schools. A new structure is to be set up involving the formation of a joint student-faculty council to concern itself with administrative and academic questions of common interest. The exact structure of this council is to be left up to the individual school.

Numerous student organizations exist. It is unfortunate that the vast majority of them are strongly politically colored. From the extreme right "Action Francaise" to the hundreds of leftist groups, one can find all shades of color, all political ideologies, represented. The inscriptions on the walls in the student part of town form a strange amalgam of political opinion. Anti-American feeling is quite strong. In this area one can never get too far from an anti-Vietnam sign or the word Nixon spelled with a swastika instead of an x. Another regretful aspect of the picture is the deep division even among groups with similar ideas.

One day I was walking around the Sorbonne trying to find some students to talk to. This proved to be rather hard because it was summertime and moreover French students are not anxious to talk to foreigners. I finally ran into a conversation. A student, calling himself a Maoist, was explaining to some other students the aim of the organization he belonged to. He was arguing that it was very important for the students to unite with the workers in bringing about the revolution; how the revolution was to occur in three stages: first the ideological one where the masses will have to be educated by them in the revolutionary ideas, second would be the stage of taking arms and gaining control of the country, and thirdly they would have to resolve the new contradictions that would arise within the people. At some point I broke into the conversation and asked what he was studying in the university. He answered that his field was metallurgy, but his real purpose at the school was to recruit more students in his organization. A little taken by surprise I asked whether he had any professional interests, whether he found any meaning in his studies.

ELLA: Ella Fitzgerald; Warner-Seven Arts Reprise 6354.

This album can best be compared to a Whitman's sampler; it's good, but never has quite enough of your favorite kind.

Ella Fitzgerald is probably one of the best jazz vocalists of all time, and as such, she has a very distinctive style to lend to any song she performs. On this album, she takes a variety of songs by a variety of writers, and does them her way.

The album includes four Motown type songs (mostly by Smokey Robinson) including "Get Ready," "Ooo, Baby Baby" and "Knock on Wood." These fit so smoothly into her style that she could have a set of single hits on her hands. Burt Bacharach wrote another smooth song included, "I'll Never Fall in Love Again." This number is not very surprising or exciting, but it is good.

The other songs on the album come almost as a shock. After all, who would expect a sequence of songs including "Savoy Truffle" and "Open Your Window" (a Harry Nilsson song) on an album by Ella? Other songs include two by Randy Newman, "Yellow Man" and "I Wonder Why." These two are well written, but not his best. The most amazing thing is that these songs can be done well Ella's way. And they can!

This is the best album by a female jazz vocalist that I've heard in a long time. If you like vocal jazz, or just Ella, then I would highly recommend this album.

-Nick Smith

He was silent for half a minute and then replied: "Are you by any chance a Trotskiist?" and went on to explain how making revolution was the only meaningful educational experience...

And I would like to stop here. My visit to Heidelberg was much less illuminating because of my poor command of German. Moreover I do not want to finish this letter with any conclusions because the above remarks and incidents have no unity. They are by no means a systematic study of any aspect of European higher education; rather they should be interpreted as a series of scattered observations during my trip to Europe, which I thought it was appropriate to mention because of their own interest.

Once again I would like to express my appreciation for your award.

The Critical Ear

ROD MCKUEN IN CONCERT AT CARNEGIE HALL, Rod McKuen, Warner-7 Arts No. 1794.

This double album was recorded live at McKuen's birthday concert. It is perhaps his best and worst album to date, in the selection of songs included. It is certainly complete, containing almost every good song that McKuen has ever written. It is marred by a few flaws, mostly the result of taping a live concert. I'll comment on these first, and save the best for last.

The orchestra which provided the backing for McKuen's singing also provided two Overtures for the two halves of the concert. These medleys of vivisectioned bits of McKuen writing are very, very heavily orchestrated, and at best sound pretentious. At worst they are ludicrous. The album begins with a magnificent *crescendo* (complete with heavy tympani) which leads into "If You Go Away." It just doesn't work! The rest of the overture isn't quite that gross, but McKuen's work just doesn't lend itself to the medley treatment.

I think some of the songs included in the concert were wretched, tho' I don't suspect that any two people will agree on just which songs shouldn't have been included. Personally, I find "Joanna" and "Trashy" to be just about the worst songs that McKuen has ever written. On the other hand, I happen to think that "Stanyan Street" is fantastic, and I've known people who wouldn't dare listen to that poem on a full stomach. In any case I'd rather talk about the cuts I did like.

My favorite cut, by far, is "Do It Yourself Protest Songs & Don't Ban the Bomb" (a protest waltz!). All you Nixon fans (if such creatures exist) had better skip this one. In the words of McKuen, "We should all stand behind Mr. Nixon... It's his best side." A close second favorite is "Amsterdam," a boisterous piece in the vein of "Pleasures of the Harbor."

After that, there are just too many good cuts to describe them all, so I'll cop out and just list some. There's "If You Go Away," "Seasons In the Sun," "I'll Catch the Sun," "The Art of Catching Trains," and "Jean," to mention only a small sampling. There are many, many more that I haven't listed. This is a double album, so I could spend the whole review just listing titles for you.

As you may have figured out by now, I recommend this album to any McKuen addict who doesn't own the albums that these songs originally appeared on (only a few of the songs have not been recorded before). It's a good album to give someone who hasn't heard too much McKuen; it's a good sampling of his work. As a whole, there is a good 90 minutes of listening here.

-Alan Stein

LEONARD BERNSTEIN AND THE NEW YORK PHILHARMONIC: Schubert, Symphony No. 5; Mendelssohn, Symphony No. 5; Columbia MS 7295.

Both these works are symphonies in the Romantic tradition as typified by Beethoven. They are not amongst the best-known works of either composer; while not truly great pieces of music they are certainly very good.

Much the same rating could be applied to Bernstein's performances of these two works. The renditions are good, solid, and workmanlike. However, they are not much beyond this. The performance of the Schubert especially cannot be called very inspired, although it is technically very good. The Mendelssohn, especially the final movement, is much better, being played with a good deal more expression and feeling.

In short, while this record does not contain great performances of great symphonies, it does contain good solid performances of some very good symphonies. Anyone with a special liking for the music of these composers could do worse than to get this record.

-Duncan Agnew

WANDA LANDOWSKA, WITH ORCHESTRAS CONDUCTED BY WALTER GOEHR AND EUGENE BLOT: Mozart, Piano Concerto No. 25 in D; Hayden, Harpsichord Concerto in D; Seraphim 60116.

This record reissues two performances made in 1937. For a recording of this date, the fidelity is very good indeed. The record is, of course, monophonic, and there is a certain loss of the higher frequencies, but otherwise on the whole the fidelity is more than adequate.

These performances represent what was in their time a revolutionary style of playing Mozart and Hayden. Wanda Landowska was a pioneer in the rediscovery of the classical harpsichord and piano. By studying period documents, she was able to gain considerable insight into the playing techniques in use in the time of the original composers, which she herself then used.

As well as being a student of classical keyboard techniques, Wanda Landowska was a performer of great skill. These recordings are evidence of this; they show a great deal of precision and control, on the part of the orchestra as well as the soloist. The style of playing is in accord with the air of the music: controlled while not entirely unemotional. At the same time, the soloist has not hesitated to add occasional interpretive fillips (in two cases whole cadenzas). These display her amazing technical skill, and, as might be expected from someone with her background, accord very well with the rest of the music. These are, in short, very good classical concerti superbly performed; they deserved to be reissued.

-Duncan Agnew

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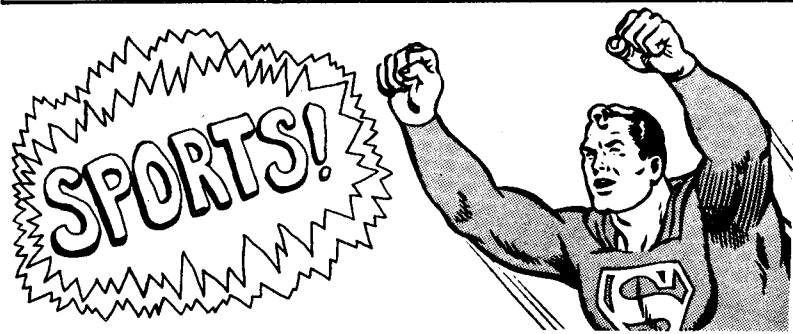
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Flems Clinch Tie in Interhouse Softball With 4-2 Win Over Page

Softball Standings
Through 10/21

	W	L	Games Remaining
Fleming	5	0	Lloyd v. Fleming
Page	4	1	Page v. Ruddock
Ricketts	3	2	Lloyd v. Blacker
Lloyd	2	2	Dabney v. Ricketts
Dabney	1	3	Blacker v. Dabney
Ruddock	1	4	
Blacker	0	4	

The Fleming House softball team got by Page Tuesday afternoon by a score of four to two to take a one game lead in interhouse softball competition. With just one game left to play for both teams, the best Page can do is to tie Fleming.

Both Page and Fleming had perfect records of four wins and no defeats prior to the game Tuesday. Fleming, with a 5-0 record up to Wednesday, plays Lloyd in its final contest. Page will face Ruddock in

its last game in hopes of finishing with a 5-1 record and a possible tie for first if Lloyd can beat Fleming.

Lloyd was in fourth place with a 2-2 record after losing to Ricketts two to one Tuesday. The Lloyd players lost to Page last week by just two points, 6-4, and there is a distinct possibility that they may be able to beat Fleming. However, Fleming definitely had the inside track to the softball championship as of the time when the paper went to press.

Variable Water Polo Squad Bows to LA State Before Beating UCSD

by Mike Stefanko

If the New York Mets' playing style changes between this year and the next anything like the water polo team's style changed between Saturday's championship and Wednesday's game, the Mets will be a cellar team for sure. No one looked sharp as L. A. State swamped Tech 8-5. The offense was able to assert itself for the first half and help shore up the weak defense to bring the score to 4-4. But coming out of the halftime rest, Tech appeared worn out and mentally down after their great job they had done on Saturday. L. A. State quickly took advantage of this and piled on the points.

Feeling bad about Wednesday, Tech determined to Reck-tify the situation Saturday. They looked down, but the defense was back in form and held the San Diego challengers to only two penalty shots. The offense was sluggish for the first half, but managed to come alive and scored four goals for the victory. UCSD was much tougher than expected and definitely stronger than last year. Tech seems to have little enthusiasm for crushing opponents but even less for losing.

Things get interesting this week as league competition begins with contests with CHM and Pomona scheduled.



Bruce Ault, Page's softball pitcher, obligingly gets out of the photographer's way after he has initiated a key defensive play: throwing to Tom Bicknell to get Larry Waterland out. —photo by Levin

Pomona Erupts in 2nd Half To Bury Beavers 41-0

by Richard Short

The Caltech football team played its best half of football of this season against the Pomona College varsity here Saturday, according to head coach Tom Gutman. Mr. Gutman stated that eight men were playing on both offense and defense against the Beavers' toughest opponent thus far this year. With tiring players and lack of depth, the second half has always been critical for Caltech.

No team has ever scored more than one touchdown against the Beavers in the first half of play in 1969. In the game Saturday the Tech squad continued this record, allowing Pomona just seven points in the first half of play.

However, Pomona capitalized on several Caltech mistakes in the second half to score two touchdowns in the third period and three more in the final stanza to win 41 to 0.

Oxy Humbles Tech Harriers 9-38

by Martin T. Smith

Occidental defeated the host Caltech cross country team Friday 19-38 at Brookside Park. Even this lopsided score did not show the true might of the Oxy team, as several of their top runners were resting for a dual meet with Westmont on Saturday.

Tim Curren took first for Oxy in 23:47, with Jim Bean second, and Gary Pope leading the Caltech squad in third, with the best time for a Caltech runner this year (24:01).

Tomorrow (Friday), Caltech meets Pomona in the final home meet of the season, a must win meet for the Beavers if they are to have a winning season this year.

The game wasn't really as lopsided as it sounds by the final score. Pomona compiled 14 first downs to the Beavers' six.

Coach Gutman remarked that the team has been consistently improving and that the game Saturday at San Diego should be a close one. The team that we'll be seeing, not the same team we beat last year, is beginning its first year of competition in football. Our team's head mentor urges all students to attend.

Gutman named Paul Dresendorfer, Dan Nagle, Mike Brennan, Bod Bales, Tom Blaschko, and John Ellis to the Committers' Club for this week. This is the group of players who gave 100% in the game Saturday.

The head coach also expressed appreciation for the marching band that performed in the last few games. He said that the band is appreciated by the football team as well as by the spectators.

Referendum on ASCIT Tax Status

by Stephen Horner

On Wednesday, the 29th of October, along with the elections of class officers and IHC Chairman, there will be a referendum concerning a proposed amendment to the Articles of Incorporation. The reason for the amendment is a needed modification of our tax status, so that we may receive tax-free grants from foundations. We are officially non-profit, but the paragraph under which we are exempted does not allow us to receive grants without paying income taxes on them. With the inclusion of the proposed

amendment, we will come under Section 501(c)(3) of the Internal Revenue Code, which will enable us to avoid those tax payments. We have escaped such payments in the past by the fact that the grants either were given by government agencies (which tend to ignore the law) or were given to the Institute and transferred to ASCIT by a rather dubious process.

The proposed amendment's actual purpose is to clarify the non-profit nature of the corporation. Technically, we are not incorporated as a non-profit corporation in that there is no provision for the distribution of assets should ASCIT be dissolved, and the IRS would get upset if we accumulated a large amount of assets and then dissolved, taking the profits and distributing them among the members. The Section specifies that we must turn our assets over to another non-profit organization exempt under Section 501(c)(3), for example, the Institute.

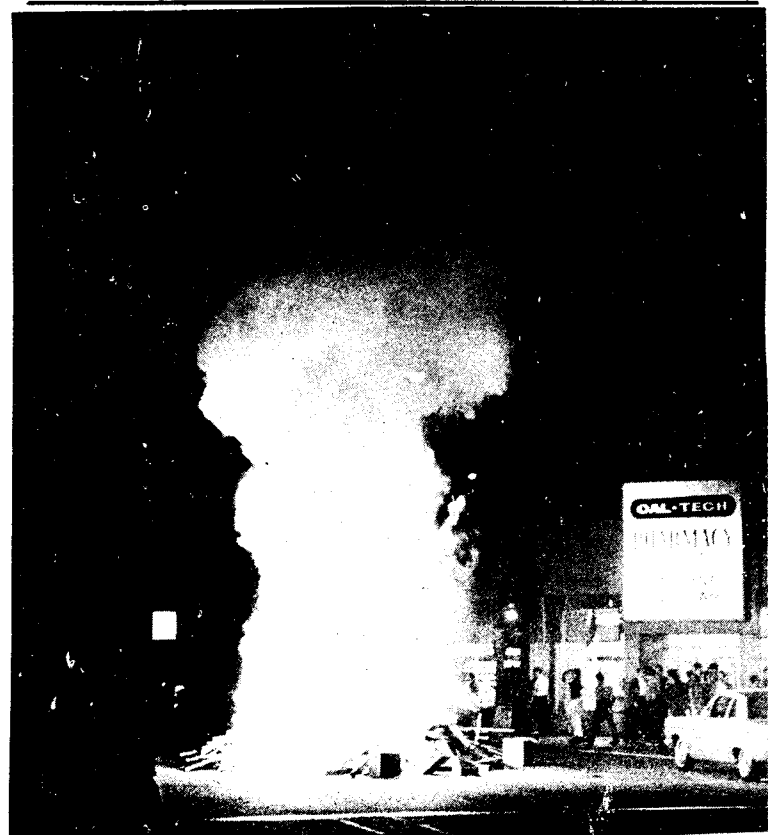
Please vote "YES." Text of Proposed Amendment: *Upon the dissolution or winding up of this corporation, after paying or adequately providing for the debts and obligations of this corporation, the remaining assets shall be distributed to a non-profit fund, foundation, or corporation which is organized and operated exclusively for charitable, educational, religious, and/or scientific purposes, and which has established its tax-exempt status as an organization described in Section 501(c)(3) of the Internal Revenue Code.*

Tech Soccer Team Ties Pomona 1-1

Ralph Graham kicked a goal in the opening minutes of the first period to give Caltech a one to nothing lead over Pomona in the soccer game there Saturday. The Beavers controlled the game and held their lead safely through three periods and seemed to be on their way to victory.

However, the home squad apparently became a little overconfident in the final period and slowed down somewhat. Pomona scored a point early in the final stanza to tie the game at one-all, and that is the way the score stood when the contest ended.

The Caltech soccer team now has a season record of two wins, one loss, and two ties, excluding the game here yesterday against Whit-



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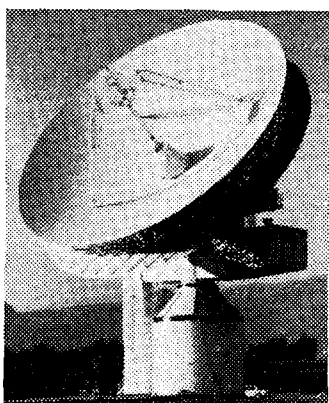
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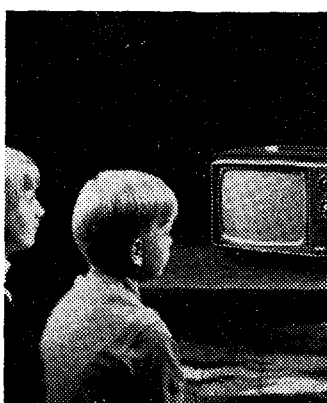


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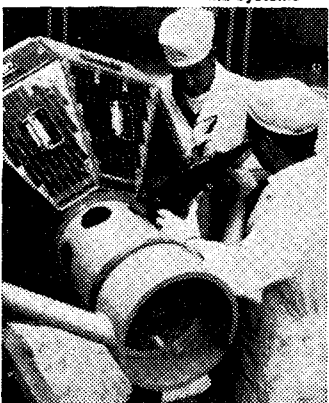
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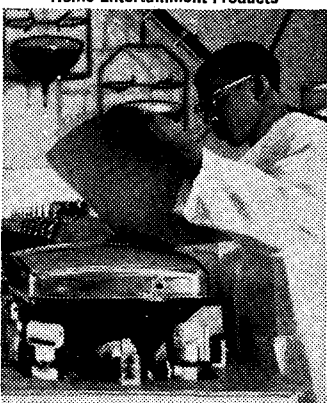
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—Anonymous Headline Writer

Umlauts über Alles

U. of N. to Run G. I. Certificates On Computers

The University of Nebraska at Lincoln has informed the Veterans Administration it is computerizing G.I. education certificates to speed up payday for enrolled veterans.

The University said all students enrolled under the G.I. Bill will henceforth have their certificates of eligibility transferred to the computer process for a "one-day" run-through for mailing to VA regional offices.

VA cannot prepare G.I. educational allowance checks until it receives the enrollment certification from schools. At most educational institutions these are hand processed for forwarding to VA and are often misplaced temporarily.

At Lincoln, University officials have now confident the computer will speed up the whole process of reporting and, in turn, speed up VA checks eagerly awaited each month by G.I. students. The VA hopes so and reminds students to turn in their certificates of eligibility so the computers can get to work.

NOTICE

Under the new bill which is being considered by Governor Reagan, stating that Topless - Semi Nudity - Complete Nudity entertainment will be left up to the adult people of the community, The HI LIFE (1758 E. Colorado) is now conducting a poll to find out what the adult people of Pasadena want to see as entertainment.

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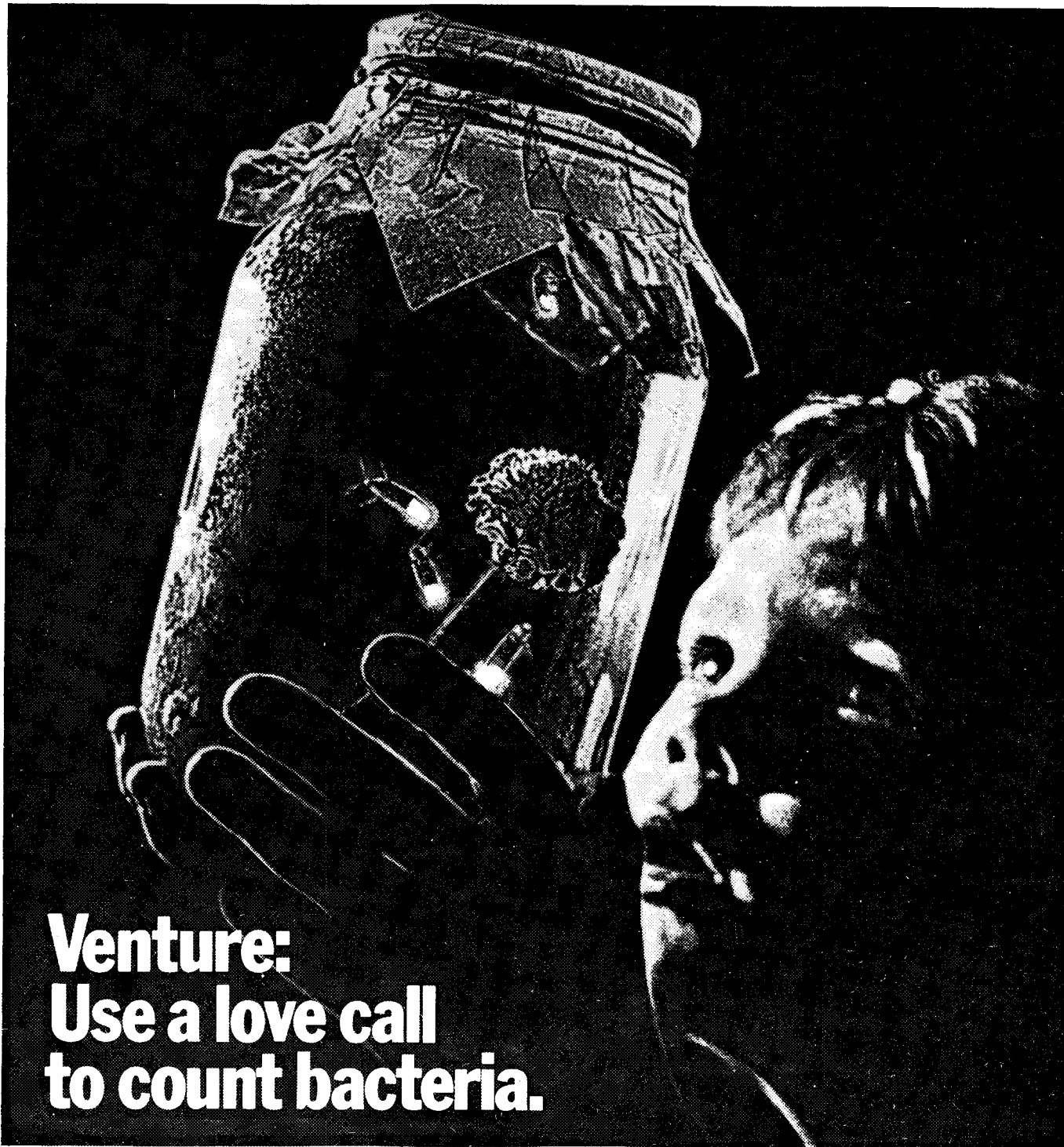
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