Volume LXXVI

D_IT_CH Day

is coming . .

The CALIFORNIA Tech

Pasadena, California, Friday, April 11, 1975

Mind Researcher Lilly **Explores The Senses**

by D. Callaway & G. Simay

John C. Lilly, M.D. (CIT Class of '38) is an explorer of the mind. He discovered that floating in a special tank and undergoing sensory deprivation enabled him to safely experience vivid hallucinations and other "far out" states of being. Lilly and others have since done extensive work on sensory deprivation. (Feynman was one of his subjects.)

Lilly has also studied dolphins and drugs. His books include Man and Dolphin; The Center of the Cyclone; and his soon to be released Simulations of God. His Y-sponsored lecture before a packed Ramo audience last Tuesday concentrated on his tank experiences:

"Feynman was lecturing on quantum mechanics at the Hughes Research Labs in Malibu. I decided to go down there to listen to him. While I was in the lobby, I met a guy I first thought was the janitor. He turned out to be Feynman. I had fifteen minutes to convince him he ought to go in the tank. Well, I succeeded. Every Wednesday morning for the next twelve weeks, Feynman would submerge himself in the tank for two hours. In the afternoon, we'd all go to hear him lecture on advanced quantum mechanics. Feynman gave me a copy of his Lectures on Physics with the inscription, 'To John Lilly with thanks for the hallucinations'." Into the Tank

In 1954, Lilly began his tank experiments, with himself as one of the subjects. "I discovered many things but didn't dare reveal them. At that time I was

with the National Institute of Mental Health as one of the researchers and not one of the patients ... Later on, the government supported us because they thought we were doing brainwashing experiments."

Actually, the tank experience couldn't be further away from brainwashing. "The intact adult is always there." The tank experience was different from states induced by LSD, peyote or mescaline. "From 1954 to 1964 we never mixed LSD with sensory deprivation. From 1964 to 1966, when it was still legal, I was in the tank under the influence of LSD and we studied its effects. With LSD, you actually have a constricted consciousness, not an expanded one. LSD is like a searchlight that enables you to go where you've never gone before, but without the drug you have full peripheral vision, as it were. You know, you keep hearing the phrase 'altered states of consciousness,' which includes all the drug induced states. Well, my grandmother had a cat that was altered, so if you want to call these castrated states 'altered' I suppose you can. There are really only two states of consciousness: consciousness and unconsciousness. We prefer to use the term 'states of being' to describe the various experiences we undergo." **Junior Hallucinations**

Gentle convection currents keep the subject in the middle of the tank. He is also buoyed by the heavy solution of magnesium sulfate in the water. Construction of the tank is fairly simple. Getting a good solid-state ther-

Continued on Page Six

TANKS FOR THE RESEARCH. Dr. and Mrs. John C. Lilly, along with former Photo by G. Laib guinea pig Richard P. Feynman.

Hockey Wins Again . . Bruins Bow to Tech, 2-1

by Bob D. T. Hardy

Victory to the Caltech Hockey team is like coals to Newcastle. Yet it was surprising in view of goaltender Cliff Brown's protestations that he would be unlikely to see the puck if it came near him (he was in a particularly imperturbable stupor). It was also surprising in view of the manifest vengeance-driven effort of UCLA, infuriated by the glowing account of the Tech Hockey team that appeared in the L.A. Times. Finally, it was surprising because novice Fred "Jet" Culick was substituting for veteran coach Jim Warden.

The Caltech Hockey Beavers played brilliantly. They dazzled the three fans present and attained what may have never before been achieved on the winning side in the history of Caltech sports, and may never be achieved again-a perfect season. This team, far superior to the comic norm at Caltech, must be

ranked near the top of amateur hockey, only slightly below the professionals.

To celebrate the tremendous achievement of this team there will be a wild party to which all who care in the slightest about Caltech hockey are invited at 8 p.m. Saturday, April 26, 462 South Marengo.

The Rock Hockey

Sunday's game against UCLA was hard fought, but Tech was unquestionably in control throughout. Dan Dobkin, taking the puck on a nifty pass from the wing, let the shot fly early in the first period. It was up! It was in the air! There was a pain between the goalie's ears! It was 1-0 Tech.

Jeff Culick on the bench said to the team, "That causes my heart to soar like a hawk." The UCLA coach simultaneously said, "That causes my heart to plummet like a rock." Dobkin skated back and simply said, "Yea, one

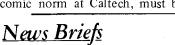
must have faith in the Lord God Scheffer.'

In the second period, Joe Sweeney poked in Tech's second goal unassisted. As Sweeney skated to the bench Culick said, "Joe, that looked beautiful." Sweeney said, "Looks aren't everything." Culick merely smiled and said, "Believe me, they're everything."

In the third period UCLA scored. As the indicator lights flashed and the sirens sounded, goalie Cliff Brown opened his eyes as if he had been sleeping, and muttered, "Get dressed honey." There was no more scoring in the game, but Leigh Moyls of Tech got into a slashing tussle with UCLA's Luce. Both were penalized. Although Moyls did not suffer any physical disabilities, he found it hard getting up afterwards.

After Saturday's game in San

Continued on Page Eight



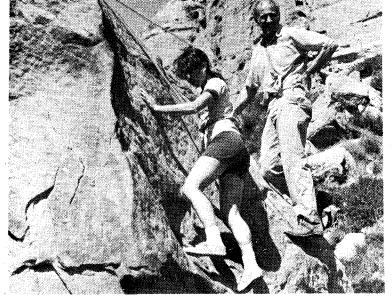
Glee Club Sings at JPL

Number 23

Last Friday marked the dedication of the new Mariner 10 commemorative stamp at JPL. The Mariner 10 mission was a 161/2 month flyby of Venus and Mercury, blasting off November 3, 1973. It carried twin television cameras and a battery of test equipment to delight chemists and physicists alike.

Presiding over ceremonies was Kathryn Wilson, Sectional Postmaster. Dr. W. H. Pickering, director of JPL, handled the introduction, and the Caltech Glee Club combined with the Third Marine Aircraft Wing Band to provide entertainment.

The Glee Club, directed by Olaf Frodsham, presented several numbers as a prelude, and also gave a selection at the end of the ceremonies. Each member was also presented with two first day covers of the Mariner 10 stamp, and an edible, delectable meal.



PASS/FALL. Prof. C.H. Wilts supervises as a beginning rockclimbing student starts her first trip up. Photo by R. Feldman

Give Blood To Those Interested

The Red Cross will be accepting blood in Dabney Lounge on April 17 and 18, 11:00 to 3:30. Those interested should contact Vivian Walker, x2374 in the Personnel office in Keith Spaulding (Business Services). The Caltech Blood Bank operates somewhat like a checking account in that the donor or any of his relatives may draw up to the amount of deposit anywhere in the U.S. Credit is still retained after the donor has severed his Caltech affiliations. This is perhaps the only way that liquid currency can beat inflation. Tuck some away for a rainy day.

Cash Confab

The first ASCIT budget meeting will be held 4:00-6:00 p.m. Saturday, April 12 in Winnett Clubroom 1. BOD members, BOD committees and organizations seeking funds should send their representatives.

Computed Costs

The final date for budget requests should be Thursday, April 10, rather than April 20. Organizations which haven't yet turned in a budget request may still turn them in before the first ASCIT budget meeting, which will be Saturday, April 12, from 4 to 6 p.m. in Winnett Clubroom One.

Concertized Classics

Caltech is again offering instruction in Classical and Flamenco guitar with guitarist Darryl Denning. The classes are free of charge and are open to Tech students only. Classes are meeting on Tuesdays in the Fleming music room. The beginning section (no previous experience necessary) is at 5 p.m. and the intermediate section at 4 p.m. For further information call x2297.

Page Two

Dropping, Section Change Rules Amended for Third Term

by Gavin Claypool

Section and track changes are now due by Drop Day, following approval of a proposal from the Undergraduate Academic Standards and Honors Committee. In previous terms such changes were due by Add Day (does anyone remember the time some Ma2 T.A.s changed sections after Add Day?).

Another new regulation is that students may drop a course without obtaining the instructor's signature if they turn in their No. 4 card by Add Day.

Interested parties are reminded that Drop Day is May 23, not May 30 as listed in the catalog.

On To Next Year! The 1975-76 academic calendar has been released, with one major divergence from past years. The week of December 22-26 will be Dead Week at Tech, with Christmas Day and four floater holidays for employees. Term break, alas, will still be two weeks for students.

As a result, grades will be due at 9 a.m., December 19, the Friday of Finals Week. Keep that in mind, bridge trolls.

Frosh registration will be September 24; general registration first term is September 29. Second term registration is January 5, and third term March 29. Memorial Day falls on May 31, restoring the three day weekend to Senior Finals Week. Ditch day is tomorrow.

THE CALTECH FORUM

"Holocaust Day"

Observed

This week, Holocaust Day is solemnly observed across the globe.

It was thirty years ago that the Allied forces liberated the - Germany was the most scienconcentration camps. Upon their arrival at the concentration camps, the horror that they saw was indescribable. There-a boy who was no more than a skeleton, barely able to move. There-an old man who had been mutilated. There-a woman clutches her dead child. Everywhere-starvation, disease, and death. And further inside-a gas chamber. "This has exterminated 300,000 Jews," a Nazi officer explained with pride. And on the liberators went, on to the living quarters of the commandant. There, too, was horror: the soap, the china, the chairs, all made from Jewish bodies. The container which held the fillings of the teeth of those who had been

killed, so that the Germans wouldn't waste anything.

It was indeed a pitiful and frightening scene that met the liberators of the concentration camps. And 30 years later, we have forgotten. Forgotten the tortured face, the stench of dead bodies rotting in the sun.

tific, the most cultured, the most technologically developed country at that time. How could such an inhuman act as the holocaust have occurred?

The answer is one that is important to us. Here at Caltech we are working to improve the society we live in. But the lesson of the holocaust we must always keep in mind. Science is not enough. It will not solve the world's problems. The "doctors" in the concentration camp believed in pure science. And in the name of pure science they conducted experiments on human beings that were shocking. But if we always bear the lesson of the holocaust in mind, then we will never have another holocaust. If

we balance our scientific back. ground with humaneness, then we have made a great achieve. ment. Don't forget the cry of the young child as he was dragged to the gas chamber, because if we do, the cry might end up being ours.

-Mark Kuber

ID Change Suggested

As a concerned and partial participant, I would like to suggest what I believe to be a beneficial change in student I.D. Regardless of any use of birthdates, it seems to me that a very therapeutic alteration would be to issue new cards to third-term seniors, cards along the old format but printed in blood red on black stock. In addition, if understood or desired by the senior in question, the legend "That's alright, too" might be added at the bottom.

-Phig Castor

Electronics Seminars To Be Televised

Four half-hour television programs on microprocessor technology will be broadcast in 20 metropolitan areas on the mornings of April 15-18.

The different sessions will present system architecture, chip fabrication technologies, potential applications for microprocessors, and their use in communication systems.

The series was developed by the Texas Instruments Learning Center as an alternative to traditional methods of dispersing the latest technical information.

As an aid to the series, the Center has prepared a 226-page handbook containing up-to-date reference data. The Microprocessor Handbook is available for \$24.95 from TI, P.O. Box 3640, M/S 84, Dallas, TX 75285.

Locally, the four-day introduction airs on KTTV, channel 11. For other areas, check the ad appearing April 14 on the TV page of most newspapers.

Session Descriptions April 15-System Architecture.

A discussion of digital computer system architecture as a

basis for understanding micro-

processors. Evolution of microprocessors ... peripheral controllers . . . parallel processors . . . Direct Memory Access.

April 16-Microprocessor Logic: What Type?

Chip fabrication technologies are reviewed-including most MOS forms, TTL, Schottky TTL, and the new IIL (Integrated Injection Logic).

April 17-Potential Applications for Microprocessors.

Guidelines for using microprocessors, including both advantages and limitations for certain types of equipments. Shows how microprocessors can lower costs, shorten design cycles, improve performance and reliability in practical applications.

April 18–Using Microprocessors in Communication Systems.

Discusses problems of digital communications and typical hardware solutions. In-depth applications guidelines show how microprocessors can be used economically within this broad field.

Fellowship Profiles-- Dr. Bruce Murray

by Ed Bielecki

(This article is the first in a series on this year's Guggenheim Fellowship winners who are currently members of the faculty at Caltech.)

When Professor Bruce Murray, of the Space Photography Lab, was awarded one of three Guggenheim fellowships given to Caltech faculty, he was happy for several reasons, not the least of which being that the fellowship, which is used to help defray the cost of a year of full-time research, will enable him to have an extended escape from Tech for the first time in 15 years

FRANKLY SPEAKING

(Tech has no regular sabbatical program.).

The Guggenheim fellowships are awarded on the basis of previous accomplishments and future work, in all phases of the arts and sciences.

Professor Murray said he will spend his year of work in La Jolla doing research into "the comparative planetology of the terrestrial planets," (Mars, Earth, Venus, Mercury and the moon). Much of the data he will use will be very familiar to Professor Murray, who has worked on planetary probes from Mariner 4, in 1961, to the recent Mariner

by Phil Frank

10, for which he was photography team leader. His research will culminate in the writing of a book on his findings.

Professor Murray, who attended MIT and received his BS, MS and PhD in 1953, 54 and 55

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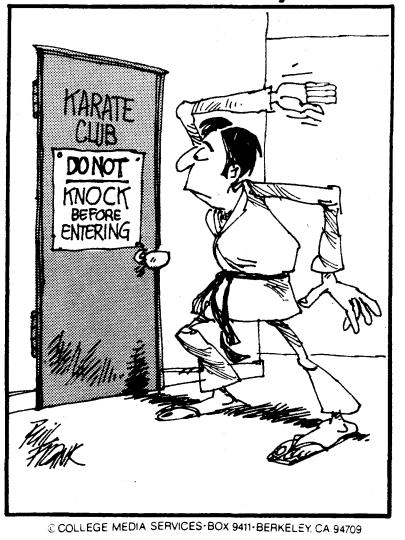
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"The Great Race"

THE ASCIT FRIDAY NIGHT MOVIE

7:30 p.m. & 10:00 p.m. in Baxter Lecture Hall

Admission: 50c-ASCIT members and their guests; \$1.00-anyone else **NEXT: A Funny Thing Happened** on the Way to the Forum

Beatty, Edward Bielecki, Flora Boyer, David Callaway, Marc Donner, Alvin Drehman, Fred, Ray Jean, Morris Jones, Phil Massey, Dick O'Malley, Peter Pathe, Chris Russell, Etaoin Schroedlu, Alan Silverstein, Nick Smith,

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Friday, April 11, 1975



This week I find myself entertaining thoughts of reclusion. You may entertain other thoughts, though, so on we go. The 29th Annual Coleman Chamber Music Auditions begin today in Ramo at 4:30 p.m. These auditions will last through the weekend, with the winners performing in Ramo Sunday at 3:30. None of the participants are over 26 years of age, and they are some of the best in the world. This is an opportunity comparable to that yesterday with the Los Angeles Chamber Orchestra, one which I hope you saw, as I hope you will see this (can you follow the pronouns? Send your replies to me at 105-51 on hemp bond, and if you understood, you'll become



eligible for the special grand prize, & which I'll enjoy immensely).

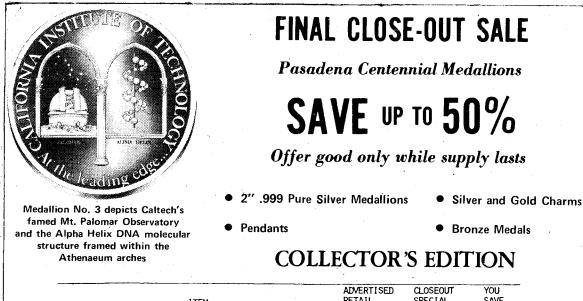
Also on campus will be the final lecture of the Ramo Perspective Series. The speaker will be David Hamburg, the topic "Behavior Under Stress." Dr. Hamburg, a Sherman Fairchild Distinguished Scholar, has been Chairman of the Dept. of Psychiatry at Stanford for 11 years. He has a great deal to say about stress, perhaps as much as the stress you feel (strains of the Ride dancing in your head).

This would seem to be the week to announce comics. Over at Claremont, in Bridges Auditorium on May 2 at 8:15, Bill Cosby will hold forth. At the Wilshire Ebell on April 23 at 8:45 Mort Sahl will be doing a benefit show for the Building Fund of the Friends of Gifted Children.

I've only one more thing to add this week, and I'm very pleased to be able to say it. Today is the opening of a special free exhibit at the Century Square Shopping Center of the works of M.C. Escher. This should be enough to say-I hope it is, for I won't soil him with petty descriptions. If you don't know his work, his "Circle Limit IV" accompanies this column, and if you need more, ask almost any Techer. The exhibit runs through April 20, so take it in when you go out to see Seascape.

-Chris Harcourt







One of the hardest types of act to review is the kind in which there is no order, no pattern, merely rampant chaos. Such is the case with the Muledeer & Moondogg Medicine Show. I mean, just what do you say about an act which features bits of music, lampooned commercials, an entire staged version of "Tell Laura I Love Her", an ongoing newscast, and a performer firing a rubber-tipped arrow with his guitar. Apparently, other reviewers have had the same problem, creating such immortal prose comments as: "There are two of them," "40-minute show," and "They have never held up the next act." These are not sufficiently descriptive, perhaps, but they are probably accurate. There are definitely two of them. It was about a 40-minute show. They were the closing act of the show. That covers all three quite nicely.

Press releases about MMMS presented such facts as: "The latest showbusiness kudo was a second place win at the Busch Gardens Talent Contest where they came in right after the singing Clydesdale Horses." Now, ordinarily, I would have assumed that this was a simple put-on, but I did see a photo of MMMS standing beside Ted Mack on a stage. I am no longer sure that it was a put-on. "They were disqualified from receiving the coveted Tap Dancing Peacock Trophy when discovered snorting horse manure, a felony in Georgia but just bad taste in California." I must admit that snorting horse manure is bad taste in California, and just about anything is a felony in Georgia, so that one may be true, too. "Muledeer and Moondogg Medicine Show have been featured on many TV shows for their comedy and several post office walls for tacky things thru the mails." Well, they apparently have been on TV, and the photo of them that I got through the mails was pretty tacky, all right. "A sixth encore at Pasadena's Ice House." Who am I to quibble with the count

those of you who have never seen a piano, but it is the best I can do.

On the bill with MMMS at the Ice House this week is a "new" group called Chevy. The quotations around the word come from the fact that this group is sort of a musical distillation. David Somerville, guitarist and the person who stands in the middle of the trio, is a veteran performer whose music has been a part of several groups, including the Diamonds (whose hit, "Little Darlin'," was one of the biggies of the early sixties), the Four Preps, and Belland and Somerville (guess which one he was). Keith Barbour, the guy who stands on the audience's right, had a relatively recent hit with "Echo Park." The third member of the group, Gail Jensen, looks like the magazine model and actress she is, but sings even better than she looks, which is indeed saying something. Chevy does music that is a mixture of mild folk, rock and country. Their forte is vocal quality and harmony. In fact, their only accompaniment is David Somerville's guitar. Overall, the group reminds me of some of the better music of such groups as Peter, Paul and Mary (with better singers replacing at least Peter and Paul, and maybe Mary) or Ian and Sylvia. So far there is nothing terribly forceful about Chevy's music, but it is definitely nice to listen to, and if they stay together it will be a group worth listening to many times. It is a group that is having fun up there on the stage, and shares that fun with the audience in the form of music. Chevy is good. I think they will soon be better.

After MMMS and Chevy finish up their stay at the Ice House on Sunday evening, there is a Monday night special show, to be followed on Tuesday by Tim Morgon, Kelly Monteith and Dan Murphy. Regrettably, something large and bulbous just ate my schedule, so, I can't figure out who is the featured act on Monday night. Oh, well, maybe I'll remember to get an extra copy next week. Maybe it won't get eaten until *after* I read it this time.

Page Three

ITEM	PRICE	PRICE	SAVE
.999 Pure Silver 2" Medallions (complete set of 6 w/	case) 213.75	140.00	73.75
.999 Pure Silver 2" Medallions (any design)	35.00	25.00	10.00
1 oz. 1 1/2" Antique Silver Pendant w/ Necklace	17.90	11.95	5.95
l oz. 1 1/2" Antique Silver Medallion only	14.95	9.95	5.00
3/4" Sterling Charm (any design)	12.95	6.95	6.00
Complete set of six 3/4" Sterling Charms	70.00	39.95	30.05
3/4" Gold-plated Sterling Charms (any design)	17.95	7.95	10.00
Complete set of six 3/4" Gold-plated Sterling Charms	100.00	44.95	55.05
2" Pure Bronze Medallion - City Hall design	8.95	4.95	4.00
5" Pure Bronze Plate w/ gift case	79.50	34.95	44.65
Single Bronze (Huntington Library design)	3.95	- 2.50	1.45
Double Bronze (Rose Parade/Rose Bowl)	7.50	4.50	3.00

CALTECH BOOKSTORE

- - ----

The Muledeer & Moondogg Medicine Show is sort of a visual Firesign Theatre with fewer people and a piano. I realize that this may not be of much help to

-Nick Smith

FOREIGN STUDENTS 110/220 VOLT

AUDIO – Hi Fi – and VIDEO COMPONENTS (mostly bi-voltage)

Household Small/Major Appliances

Shipping/Packing Facilities



Page Four

Social Activities Director

"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 undergraduat Houses."

Do you like to spend Friday

Jack Bacon

Tom Snyder

Hello again. Most of you will remember me as the guy against whom you voted for this office in the last ASCIT election. I greatly appreciate the three of you who were concerned enough about the functions of the office to discuss my proposals with me when I campaigned at the student houses: such feedback is valuable to an interested and concerned candidate. Since no one voiced disapproval of my proposals before the election, I must conclude that my loss to a "no" vote reflects a somewhat wide-spread conviction that I am a turkey. Gobbling up the opportunity to prove otherwise I am running again on the same platform.

I am no more (nor less) competent to chair the executive social committee than is any other candidate for this office.

My reason for running for the office concerns the second half Candidates of the job ... a separate BOD elective office which merged with Dir. Soc. Act. last year and has since been forgotten: the Director of Student Life. This office holds the responsibility for the representation, budgeting, and development of the extracurricular activities and clubs open to undergrads. The office sometimes requires diplomatic relations between the clubs and related Institute departments concerning the use of facilities (Did you know that students are charged "professional" rates for the use of all auditoriums, or that the scuba club and the Athletic department must adjust the equipment check-out procedure each term to adjust to the scheduling of the scuba course?) Why, in the absence of the "little t", was there not a centralized effort to recruit and inform incoming freshmen about the opportunities available to them in the form of "organized" club activities?

In being elected president of 2 major campus organizations, I Bluegrass Music Society will hold believe that I have demonstrated a combination organizational

night in your room reading your Feynman? Or spending an exciting night solving differential equations on the computer? Or would you rather have something else to do? The Director of Social Activities should give you that something else. You paid your ASCIT dues, now you deserve a return on your investment. The social director, as chairman of the executive social committee should provide the impetus for a *real* student social life. If I did not think that I had both the time and the desire to get the job done, I would not be running for the office. I will be doing my best to offer you a real choice between a Feynman and a social life.

-Tom Snyder More News Briefs

Converge

Candidates for the offices of Big T editor and business manager, California Tech business manager, Coffeehouse manager, little t editor and business manager, Totem business manager and Publications darkroom chairman; please contact Chen Sun, ASCIT treasurer, 24 Fleming.

Cinematech Color!

Tomorrow evening at 8 p.m. in Baxter Hall, Cinematech is showing two excellent Eastern European films: Red Psalm, Miklos Jansco's brilliantly photographed masterpiece which won the Best Director Prize at Cannes in 1972, and the haunting Shadows of Forgotten Ancestors. Both films are in color and should not be missed. General admission: \$1.50. ASCIT and GSC members: \$1.00.

Corncob Combo

The Caltech Old Time and my genuine concern for the meeting and jam session this development of your extra- Saturday, April 12, 1975 in call Jim Mullany at 449-9735 or leave a note at 14 Fleming.

Morris Jones

The office of Director of Social Activities is one I have been close to in my past two terms as a freshman. I have seen many areas where I thought I might be able to add some elbow grease to improve the status of student activities at Caltech. Once elected to the office I would be able to do that work.

The students here, in most cases, did not come to Caltech because of the extracurricular activities it provides. But once here the activities are very much a part of making life here enjoyable, and the support and promotion of clubs and activities would be my job.

I emphasize the promotion of student activities, meaning clubs, social events, and anything involving a group of Caltech people. Many of the dying clubs and organizations are dying because they have not been able to make themselves known to the people involved or interested. Also through the promotion of proposed activities and clubs we could help bring the right groups of people together and expand the opportunities for involvement.

The only requirements for this office are a strong interest in student life at Caltech, a knowledge of what needs to be done, and a willingness to do the work. I have all three. I would appreciate your support on election day.

-Morris Jones

on Saturday night at the Coffeehouse starting tomorrow night, featuring various musical artists and poets from Tech and the surrounding area. Shows start at 8 p.m. Admission to the show is 25 cents. Interested artists, it will be appreciated if you contact Moses Ma at 280-8273.

Con Call!

Are you interested in attending the Star Trek Equicon (also includes Fantasy Filmcon) in San Diego (Memorial Day

Viet Relief Asked

"Cambodia and Vietnam-a tragedy told in terms of blood and hunger-just may be the toughest problem faced by Red Cross in this decade!" according to Dr. William E. Delphev, Chairman of International Activities for the Pasadena Chapter of the Red Cross. Considering the way this decade is going, this is a truly frightening assessment.

Doctor Delphey said the International Committee of the Red Cross and the League of Red Cross Societies are currently conducting medical and nutritional programs for refugees in both countries, providing food, medication, tents, sleeping mats and cooking utensils.

"Red Cross has parachuted bread and rice to isolated groups of refugees and chartered boats for sea transport of relief to isolated provinces, and such efforts are being expanded hour-

ly," Doctor Delphey said. He explained that all such supplies and equipment are being purchased locally by Red Cross workers, as transport takes too long, and materials donated might not be the correct type needed in those areas.

Doctor Delphey said Red Cross Chapters are accepting cash contributions to support Red Cross relief programs in Cambodia and South Vietnam, and said any cash, checks or money orders sent to the Pasadena Chapter, American Red Cross, P.O. Box 399, Pasadena 91102, if marked for Cambodia or South Vietnam will immediately be forwarded to Red Cross workers in those areas, to aid refugees fleeing the bombs and the starvation rampant in those countries.

The life you save will be that of a total stranger, but it is a life. Give what you can.

These Trying Times

by Henry Ford II

(Mr. Ford is Chairman of the Ford Motor Company. He is also Chairman of the National Center for Voluntary Action, and Co-Chairman of the Detroit Renaissance, an organization of business firms designed to attract new business to that urban area. He served as the first chairman of the National Alliance of Businessmen in 1968, whose purpose is to find employment and training for the hard-core unemployed.)

Throughout the world, ordinary people, especially young people, are deciding that they have had it with the way things are. They are no longer willing to put up with rules and conditions which make life more narrow and less satisfying than it could be. They want a voice in decisions which affect them. They are more concerned with the quality of life and their relations with people than with the quest for status and possessions.

I believe our country, along with many others, is approaching a turning point. The growing

spirit of rebellion could ruin us or save us. It could drag us down into chaos and repression. Or, it could lead us on to greater human freedom and fulfillment than we can now ever imagine.

Whether we take the one route or the other depends on how we respond, as a people, to the nearly universal conviction that the world is not as it should be.

Many of the young people I have talked to have grave doubts about whether it is still possible to start with what we have and work within the system to build something better. They look about and see a society composed of huge, impersonal, hierarchical institutions-big universities, big business, big labor, big government. They believe, correctly, that big institutions have a built-in tendency to become rigid, arbitrary and unresponsive.

Young people feel themselves under pressure to live by rules they did not make and which no one can explain or justify to their satisfaction. The power to change the rules seems out of

Continued on Page Seven

curricular activities. I care, and room 25 Baxter at 2:00 p.m. All even if you don't, please give me persons-beginners or otherwisethe chance to do the job I want are welcome. For information to do. I'd appreciate your vote. -Jack Bacon

Murray

Continued from Page Two respectively, in the field of geology, came to Caltech in 1960.

He has long been involved in planetology, coauthoring Scientific American's first article on infrared astronomy, subject Mars; and being appointed, in 1963, Caltech's first professor of planetary science. He is also a recognized authority on the U.S. space program, and was recently presented the NASA Distinguished Public Service Medal, the highest award to a non-employee.

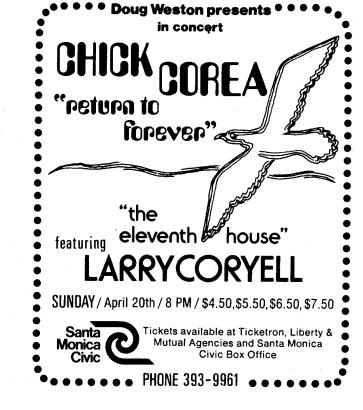
Coffeehouse Cacophony There will be a series of shows

weekend, for the uninformed)? See Bruce Miller in 38 Dabney House for details on car pools and hotel rooms.





PRIVATE PARTIES BY RESERVATION



Friday, April 11, 1975

SILVER SCREENING

The Prisoner of Second Avenue. An adaptation of Neil Simon's play, produced by Warner Brothers.

Another Neil Simon play has survived the transition from stage to the silver screen. Simon's The Prisoner of Second Avenue reflects an optimistic view of the ultimate struggles with urban living.

Jack Lemmon portrays the 'prisoner", a middle-aged, moderately successful businessman who loses his cushy job after a score of years and has to face the city on its own terms.

· And the terms that New York gives are the crux of the story: the eternal sounds of urban living, the cardboard lifestyle, the wafting odors of garbage, the violence of overcrowded people. The prisoner's ego, already weakened by his loss, breaks completely when reality pushes in, leaving Lemmon cornered and wounded.

Anne Bancroft gives a strong performance as the prisoner's wife-or is it she who's the prisoner? For all of his troubles with urban living, the character Lemmon plays never once considers leaving the city. It is his wife who continually broaches the possibility, meeting only with strict negatives.

The role of the wife is smooth, however. It is more a counterpoint to the role of the husband than it is a role of its own. When Lemmon loses his job, Bancroft is forced to look for one. When Lemmon suddenly regains his ego, Bancroft loses her job and begins to have a breakdown of her own. It is a sustaining role, strong only where it needs to be.

Gene Saks performs the only other strong characterization in the movie as the prisoner's Continued on Page Eight Janis. Universal Directed by Howard Alk and Seaton Findlay. Running time: 96 minutes. Rated R.

Lest the title deceive, Janis (opening today exclusively in Westwood) is not some sort of schmaltzy · biography of Janis Joplin, but a spirited collage of selected live performances and interviews.

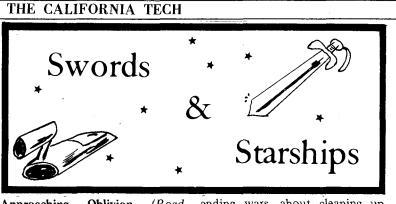
The film presents no less than fifteen songs, vigorously performed in concert by Janis and her bands: Big Brother and the Holding Company, the Kozmic Blues Band, and the Full Tilt Boogie Band. Most songs are performed in their entirety-a welcome change from the piecemeal approach to songs other rock "documentaries" have employed. The sound is good and loud--it would be to the customer's advantage to locate a theater with a decent sound system to fully enjoy the movie.

Photographically, it's as if one was sitting in the front row at a Joplin concert-lots of closeups of Janis and occasionally her band. There are enough cuts and pans in the camerawork to make the film visually exciting, but not so many as to distract or annoy the audience.

The nonmusical segments of Janis are mostly interviews with dimbulb TV reporters and provide considerable comic relief. Also included are a segment from The Dick Cavett Show, a studio recording session, and a clip of Janis' return, in full regalia, to her hometown (Port Arthur, Texas) for a high-school reunion.

Janis has great sound, reasonable photography, a considerate format for the music, and even a little comedy. It's definitely worth seeing, especially if you've never seen her live before. An exhilirating experience.

-SMC Sweeney



Approaching Oblivion (Road Signs on the Treadmill Toward Tomorrow) by Harlan Ellison, published by Walker and Co., hardbound \$8.95.

Quite often I don't get around to reading a book until it has been out for quite a while. In this case it was laziness and cheapness on my part, since we didn't get a review copy, and I didn't feel like tracking one down until someone handed it to me recently.

Approaching Oblivion is a book of stories about the ends of things: lives, worlds, civilizations, childhood and just about anything else that seems permanent when you're on the inside. It is made up of eleven stories, ten of them relatively new, one written in 1962. There are also twenty pages of forewards and introductions, ones that are actually worth reading.

"The great lizards owned the planet for something like 130,000,000 years, but they didn't have slant-well drilling, pesticides, pollution, fast breeders, defoliants, demagogues, thermonuclear warheads, nonbiodegradable plastics, The Pentagon, The Kremlin, The General Staff of the Peoples' Army, Ronald Reagan, Richard Nixon and the FBI.

"Poor lizards. What joys they missed. Had they not been so culturally deprived, they might have sunk into the swamps in a mere three thousand years."

Ellison comes across in this collection as more disillusioned with the world than ever before, even for him. It is really hard to call him cynical when so much of what he says is flat-out true, and this is the real bummer. A few years ago, people talked about using love to save the world, about ending pollution,

ending wars, about cleaning up governments. Now they talk about where they are going to escape to when civilization as we know it folds. I don't know about you, but that sort of thing scares me shitless, because it means that there are more pessimists than ever among the most optimistic groups willing to do anything. No more love-and-Woodstock. Just get out from under, and fast.

In Ellison's introduction, there is mention of the letters he received after dedicating one of his books to the memories of the four Kent State students killed by the National Guard. The most frightening one, printed in its entirety, is an attempt to "correct" Ellison's thinking by informing him of the fact, in a calm and reasoning manner, that the Kent State students were "Communist-led radical revolutionaries and anarchists, and deserved to be shot, whether by a firing squad or by the National Guard.'

Deserved to be shot, do you idiots out there understand that! There are people out there who really want to shoot anyone who isn't a flag-waving, pablumsucking, my-country-right-orwrong android.

This collection includes both relatively contemporary stories about the death of freedom in the world as it is about to be, to hopefully insane fantasies of different futures, with all but one or two of them being downers. There is even a Yiddish science fiction story, only the second I've ever seen. There is a story about the earth rebelling against the stupidities of mankind, ridding itself of sources of pollution ranging from Detroit to Barbara Streisand. There is a story of a thief in a world where

Page Five

there is almost nothing to steal. There is an old-fashioned horror story about a jazz musician and a truly undying love (one of my personal favorites since it was originally printed, years ago). There is even a story about the last man in the world (the world at that time consisting of Hanover, New Hampshire) as well as a story about a man at the end of the world, a poet narrating the death of a planet. The most powerful stories in the anthology are, however, the ones that hit so close to home as to frighten with their likelihood not their strangeness

"Silent in Gehenna" is a story about the last revolutionary in America, the last one rebelling against a police state that puts barbed wire around the USC campus and tries professors for deviating from approved course materials. "Knox" is a devastating story about the destruction of one man. "One Life, Furnished In Early Poverty" is the kind of story that Rod Serling liked to do on TV, of a man finding a part of his past. All of these are good literature, not just good SF, and that is just what SF is really all about, being both.

Harlan Ellison marched in Selma with King in 1965. He walked out on money-making projects that he didn't like on any number of occasions. He is blunt, brutal, a bastard, and tells the truth no matter who it hurts. His stories are the better for it. This book is the better for it.

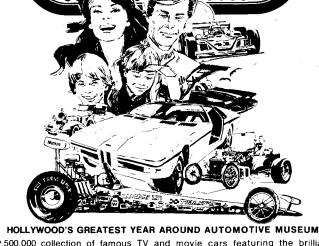
There is a quotation that begins the first story in Approaching Oblivion, from Pastor ~ Martin Niemoller:

"In Germany they first came for the Communists and I didn't speak up because I wasn't a Communist. Then they came for the Jews, and I didn't speak up because I wasn't a Jew. Then they came for the trade unionists, and I didn't speak up because I wasn't a trade unionist. Then they came for the Catholics, and I didn't speak up because I was a Protestant. Then they came for me-and by that time no one was left to speak up."

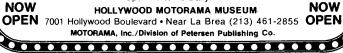
Harlan Ellison is trying to speak up. It's too bad that so few are left to listen.



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On the sixteenth of April, a Wednesday, AMP Special Industries will present a trade show in electronic connectors and interfacing devices for the benefit of

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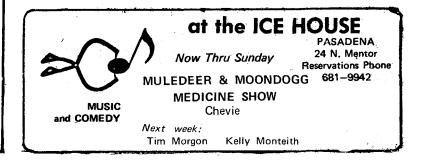
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all those interested in this field The products shown will range from simple LSI connectors and substrate modules to complex programming boards and miniature electro-mechanical relays. All facets of connector technology will be fully covered with the aid of technical experts on hand and the availability of working samples and data.

With the state of the art changing so rapidly in connector technology it is hoped that this

show will bring you up to date with what is new and useful in your labs. If you missed the NEPCON and WESTCON shows this should make up for it.

The show will be held on April 16th from 8 A.M. till 5 P.M. in Clubroom 1 in the Winnette Student Center on campus. It is an all-day affair but with no formal program. You may come and go as you please. There will be handbooks and samples available.



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<u>The Fred Logs</u> Hadon Joins Fray

by Fred

Hugh spent the next two weeks in the able hands of Father Aaron, the young friar who had stood with me at the rear of the party as the orc battle raged. Through his constant prayers and ministrations Hugh recovered quickly from wounds that might have kept an other man bedridden for months.

Late the next Saturday night a new face appeared before the fire. His name was Hadon. One's first impression of Hadon was size. He stood more than six feet tall and wore a huge winged helmet that made him look like a giant. Despite his fearsome appearance he proved to be quite a friendly sort. I had just been talking with Baldric (who insisted on being referred to as Superelf) and was struck by the contrast in their personalities. Hadon had heard of our adventures and had sworn to his father that he would bring honor to the family name with some great feat of bravery. I chuckled to myself when I heard this but made no effort to restrain him when he counted himself in to the next expedition we were planning.

Hugh was up and walking around by now and, being Hugh, was eager to strike another blow against the forces of chaos.

I was immersed in magical research that seemed more worthwhile than running through a bunch of dark corridors but couldn't bring myself to deny Hugh some excitement after weeks of boredom. Golden Boy, Sterling, and Superelf were equally restless and jumped in immediately dragging Legolas with them. Finally Athanasius and Father John counted themselves in. "Not to fight, of course," but to "bring the blessing of God with them" for the rest of us. All told we considered ourselves to be easily the ten most powerful lawful people in our part of the country.

We arrived at the dungeons without incident and after a few preparations began our descent from the same southern entrance we had used before. It led directly to the six way intersection but this time instead of turning, we boldly continued straight across and down more stairs further into the darkness. Clearly, a force as strong as ours could take on anything that lurked in even the lowest depths. Another fifth feet and then more stairs leading in deeper than anyone (at least that we knew) had ever been down before. At the bottom of this final flight we reached a branch and stopped to look around. The very air was heavy with gloom and seemed to swallow up the torchlight. Our footsteps rang hollowly on the stone floor. We turned to the left and broke through a series of ancient doorways. On one side of the hall we discovered a room which appeared almost empty. A small chest stood next to the far wall and leaving a guard at the door

we stepped in to look the room over more closely. I had the uncanny feeling that we were not alone.

Sterling opened the chest and gasped as he pulled out a handful of gorgeous jewels. Every eve turned to stare and at that moment a figure suddenly became visible near the door and lunged at Hadon (our door guard) with a dagger, desperate to get past him and out. Hadon's sword was faster and a few quick blows left the unfortunate magician dying on the floor. From all appearances he must have turned himself invisible when he heard us coming and then tried to make his escape when he realized how badly outnumbered he was. We left him in the small room and continued down the hall.

It zigzagged twice and then straightened again. Broken heaps of stone littered the floor where pieces of the ceiling had crumbled. Ahead of us we began to hear a crunching sound like a giant creature moving through the rubble. A huge blind head appeared around the corner ahead of us.

We froze, terrified, in our tracks for an endless moment. The first segment of a giant purple worm, its bulk filling the entire passage, pushed around the corner and then, somehow sensing us, it began to grope forward, its mouth opening and closing.

Father John was the first to shake off his fear. He reached into his pouch for the sack of belladonna he carried and tossed it into the creature's mouth. It stopped for a moment to swallow and then started towards us again. The poison reached its system quickly. Suddenly a spasm wrenched the entire length of the worm. It thrashed in its death throes within the narrow confines of the passage. Stones fell from the ceiling and clouds of dust obscured the air.

We edged backwards, still nearly paralyzed. Then the beast's convulsions subsided and he lay still before us, an impregnable barrier to any further travel ahead. No one admitted being afraid but we agreed unanimously to head back for the stairs and then to safer parts of the dungeon. We carefully retraced our path to the bottom of the first stairway and climbed up to the next level. Superelf's sharp eyes suddenly spotted something in the distance. Two shapes were moving slowly towards us. Drawing our weapons we crept closer until Superelf realized that the shapes were mummies. From legend we all knew the strength and power of an awakened mummy. One touch of their hands was rumored to leave the victim with a horrible rotting disease and none of us intended to let them get close enough to verify the legend. A plan struck me and I had Hugh and Golden Boy pour several flasks of oil out onto the floor. Someone had to stay close enough to light the oil at the last minute and Hugh

Murray Considers Science Limits in Watson Lecture

by. D. Callaway & G. Simay

Dr. Murray, Professor of Planetary Sciences at Caltech, addressed last Monday's Beckman audience on the limits of science in his Watson lecture, "Science, Transcience and Miracles":

"What need is there to discover the limits of science? Until this past century, men were strongly conditioned by their religious precepts. Only during the 20th century have we begun to strongly rely on science and technology. Many people still have a poor understanding of science: They know the 'how' but not the 'why' of science. And so we notice a widespread irrationalism today . . . Astrology, which has no scientific basis at all, is widely practiced even though our knowledge of astronomy is greater than ever before in history."

Three Limits to Science

Murray believes that an understanding of the limits of science can help combat irrational (as opposed to nonrational) beliefs. He identifies three basic limitations: First, that concepts of right and wrong cannot be derived from scientific precepts. Science provides you with the facts, and lets you decide their moral significance.

Second, "we cannot predict how certain phenomena will behave in a social context just because we understand its behavior in a purely physical context." Science must rely on experimentation as the builder of knowledge. Demanding of the scientist a priori information he cannot give will not bring us any closer to solving our social problems. Murray uses the term "transcience" to describe how we deal with phenomena that become less predictable when moved from a purely physical to a social context. Essentially, we are willing to use science to volunteered to stay while the rest of us retreated down the stairs.

The mummies came closer and at the last moment he lit the oil and fell back. Both mummies caught fire as they passed through and kept coming, burning furiously as they walked. Athanasius started praying for them to collapse before they reached us. Then behind us, a trapdoor opened in the floor and a zombie emerged. Zombies were at least something weak that we knew how to handle: Athanasius presented his cross and half the zombies were struck with the fear of God and fled. The rest of them were still on the level below and we had no trouble killing them one at a time as they came up through the trap door. At the same time the mummies collapsed in flames and we were safe again. We started up the stairs towards the surface again, edging carefully past the smoldering remains of the two mummies. Halfway to the next stairs Superelf stopped at a door we'd ignored on the way in and

better understand their physical behavior, but we seem reluctant to use science to see how they affect society.

Victims of a Hoax

Third, we have the problem of miracles, or "nonrecurring nonrepetitive phenomena". Science is limited to verifying only those events that repeat themselves. When an event occurs only once in front of just a few witnesses, a scientist cannot be sure the event was genuine. He might be the victim of a hoax or the witnesses could have misinterpreted what they saw. However, scientists do not say nonrepeatable events are impossible, they only say that they cannot verify such events.

In the Pacific Northwest, scientists have discovered widely scattered footprints suggestive of a huge simian creature, popularly called "Big Foot". Yet, the vegetation could not support any of the large simians we know. Are the footprints a hoax? Not likely-they are too many, too remote and too scattered. Consider UFOs, "which continue to occupy the attention of many people and a very few scientists". Reliable witnesses have certainly seen colored lights and strange blips on radar. But Murray points out that "jumping from colored lights to alien spacecraft is unsupportable".

A Fourth Limit

Murray believes that convinced skepticism can be as unscientific as wide-eyed credulity. Many times, the most scientific reaction to a set of baffling facts is a simple "I don't know what to make of them. We'll just have to wait and see."

Murray goes on to mention a fourth limit of science: our limits as observers. "Seeing is not always believing. The brain can be easily misled by optical illusions." Slides of Escher drawings as well as the more common illusions admirably underscored

insisted on seeing what was behind it. I was still nervous from the last battle, but being rather curious myself I agreed. We broke down the door to find five kobolds reaching for their weapons. Before they were half drawn, Superelf and Sterling had leapt in and massacred them with his point. We also have a more serious limitation, which Murray summed up in Napier's quote, "Although we don't always know what we see, we always see what we know". When a completely unfamiliar object confronts the senses, the brain will often interpret it as some familiar object. A scientist can neither take his senses for granted, nor his prejudices, but must regard them both critically.

During a large part of his talk, Murray had a large list of unverified phenomena on the screen. Some phenomena were finally verified; others were debunked. ("Velikovsky's theories were never worth anything and they still aren't".). But most phenomena—from UFOs to ESP to Martian life to faith healing remain in the "maybe so, maybe no" category.

What should our attitude be toward phenomena in this last category? Be willing to live with uncertainty. Beware of hoaxsters, particularly wien dealing with well-publicized, alleged events. And above all, "don't treat physical phenomena as though they didn't obey physical laws. If we want to enjoy a healthy subjective state, we have to be objective about objective things."

Continued from Page One mal regulator to keep the water at skin temperature is the most challenging problem.

Lilly

Sensory deprivation does not always lead to hallucinations. "Most people have very powerful programs against such activity...But the very young often have not yet developed these programs. I once asked a five year old boy, "What was it like in the tank?" and he replied, 'It's just the same as outside.' Natu-

Continued on Page Eight

Hugh started getting restless. By now the ogres must be dead and we could safely return to the surface. I disagreed. I was fully prepared to wait for hours until I actually heard the ogres leave or die. We waited some more. At last curiosity got the better of Hadon and he opened the door a

their swords. There was no treasure, so returning the door to as much of its former state as possible, we moved on.

The surface was only a few moments walk ahead now. Our vigilance relaxed a little as we climbed the second flight of stairs. Up ahead a harsh voice called to someone else, also unseen. Legolas slipped forward and a moment later returned with the news. Four large ogres were coming towards us. Hoping they hadn't heard us, we ducked back into the kobolds' lair and shut ourselves in, leaving some food outside that we'd poisoned with the last few grains of our belladonna.

Listening through the door we heard their approach, then sounds of eating, and finally silence. We waited. Hadon and crack and looked out.

All four ogres were still alive. They had been leaning quietly against the wall after eating their fill, but when one of them spotted Hadon they all jumped up and crashed in upon us.

A short, vicious battle ensued which we won by a hairsbreadth. Three of the ogres died of sword wounds. The last succumbed to the poison after a stiff fight. We suffered a few wounds, but nothing serious and, praising our good fortune and cursing ogre digestion we gratefully headed for the surface without further hesitation.

The sunlight on the surface was warm and pure and looked more beautiful than the jewels we had brought out. Mounting up, we rode back towards the town.

Friday, April 11, 1975

The Caltech Y



by Alan Silverstein

This week, wedge a little free time into your busy schedule, and find out what all this academic pressure is doing to you. "Behavior Under Stress" will be the subject of a discussion in Ramo next Wednesday night at eight. Dr. David Hamburg's impressive credentials include being a Fairchild Scholar and the chairman of the Stanford School of Medicine Department of Psychiatry. He will be the last speaker in the Y's Perspective Series. Don't forget! Be there! Add it to your list of "things to do".

For your entertainment, rather than enlightenment, make your way to the Olive Walk Quad any Friday this month, at noon. Today we feature the John Muir High School Chamber Orchestra, direct to you from (guess where) John Muir High School. In a week (on the 18th) we'll be bringing back Tech undergrad Dower, plus his ensemble, for some folk-rhythm.

Since the purpose is recreation and relaxation, attendance at these events is quite optional... pray for sun, bring your lunch, and listen to some good music.

The Caltech Y begins a new P.Y. (people-year) this term with a totally new student Excomm. The ten of us spent last weekend at the Caltech Capra ranch getting acquainted, getting continuity (from the staff and the old Excomm), and getting started on a long list of new and interesting program ideas. We're all frosh and sophs, with the exception of one grad student, and between us we represent all the houses except Fleming, with a healthy off-campus portion. If you have program ideas-don't be afraid to approach any one of us; we're all receptive.

The Excomm officers, chosen at our first meeting, are-President, Moses Ma; VP, Tim Cushing; Treasurer, Bill Newman; and Secretary, Alan Silverstein. Other members include Jill Bechtold, Dave Blum, Mark Davis, Steve Jaffe, Leslie Peterson and Diane Ross. We'll be meeting an hour a week from now on, and the minutes of those meetings will be posted

Continued on Page Eight

THE CALIFORNIA TECH

Fencers Compete in NCAA Tourney

by Lt. Brigade

With the completion of the NCAA National Championships last Saturday, the Caltech fencing team completed another season. As mentioned in an earlier issue of the Tech, we were being represented by three fencers, one in each weapon. It all started on Wednesday: all schools were required to show up at the Grand Hotel in Anaheim to check in our weapons. After the long trip down there, we found that our weapons needed some last minute adjustments before they could be legally accepted. This done, we made our way back to Tech (most schools stayed down in the area for the whole weekend), and prepared ourselves for the grueling task ahead of us. The next morning, before 7 a.m., we set out for the day's activities at Cal State Fullerton: three Techers daring to challenge the odds and the superiority of the other participants; three against the world!

Anyway, dramatics aside, the foil competition began about 9 a.m. Steve Comens, our entry in this event, was pitted against opponents from such schools as Notre Dame, Columbia, University of North Carolina, and, for contrast, Cal State Long Beach. In all, he fenced nine or ten bouts, winning one of them. I didn't see much of his last few bouts, as I was warming up for my event, epee. About 1 p.m., my pool of the epee competition began. In this, the seeding round, I was beset upon by fencers from Johns Hopkins University, Cal State Fullerton, and Brooklyn

Trying Times

Continued from Page Four

This is supposed to be a demo-

In circumstances like these,

College (I should have beaten him), and the returning two time champion from, alternatively, New York University or Finland: Risto Hurme. (He went on to defend his title.) Also there, but not in my pool, were two fencers from my old high school in New York. One, Ken Torino, from Cornell, has made it to the finals of the epee competition for at least the past two years. In round two, the elimination round, I won the only bout which I won at the meet, and was eliminated from further competition.

It is the loser's privilege to ponder the past, but here I will make one remark that sports fans have surely noticed before: athletics are not transitive. The man I beat won all of the other bouts in that pool and hence was not eliminated. Not only that, but he, Masters from Wayne State University, took second place in the finals! Griping aside, Paul Whitmore, our erstwhile saber man, unfortunately didn't win any of his bouts, but saber is a tough weapon in which to win. Better luch next year, guys.

The quarterfinals were held on Friday, but we didn't attend. I managed to wake up on Saturday early enough to get to the finals in the late morning down in Fullerton. The foil competition was, to me, boring except for one bout that Greg Benko, the defending champion from Wayne State University, lost by a score of 5-4. Mr. Benko held on to win again though.

Wayne State became the

should be raised and deserve to be answered.

My answer would be this. It is now, and it always has been, enormously difficult to live and work with other people and still be true to yourself. It is, and always has been, even more difficult to affect the way things are-to change the complex web of rules and sanctions that hold a society together.

It is not easy to be an independent individual and an effective member of society. But it is possible. To build a good life for yourself takes the initiative to find the niche in the world that is best suited to your personal interests and abilities. To have an influence on events, it is necessary to work with others who share your hopes and are pulling in roughly the same direction. To work with others and still be true to yourself requires a delicate balance between independence and self assertion, on the one hand, and cooperation and self-restraint, on

team champions on the strength of two first places (in foil and saber) and the aforementioned second place in epee. The saber finals were fun to watch, with great acting going on all over the place. You see, saber is judged by people (rather than electronic recording devices), and to convince the director and the other judges that he has scored a touch, each fencer will let out a war whoop and some go so far as to do a little dance!

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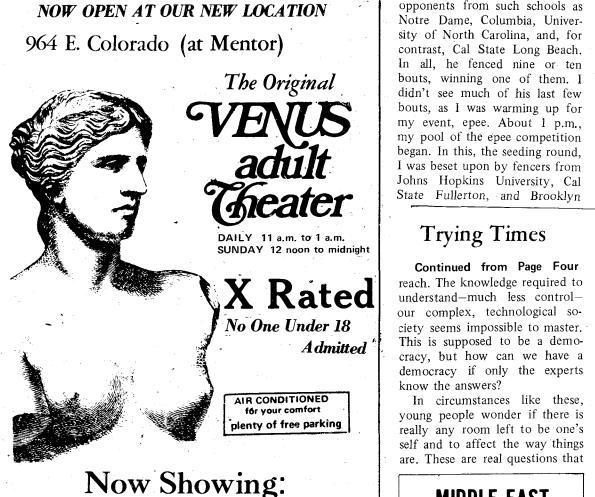
The awards ceremony was nice, with each finalist being presented an award by some random old-timer, and a rose and a kiss by one of several pretty local girls. One fencer earned some boos by shaking hands with the girl who presented the rose to him, but Mr. Benko made up for this by earning wild applause when he not only kissed the girl giving him the rose, but went over to all the others and gave every other girl in the line a kiss. Later on, when the team awards were made, he led his coach, lstvan Danosi, a septagenarian, I think, through the same procedure.

It was fun, but now we are looking ahead to next year. The team will be losing only two seniors, but one of them being the only remaining girl on the team. If Caltech ever expects to rejoin the Southern California fencing league, it will need girls on the team! So, come on, I know that there are quite a few girls out there who have taken the class. Please think seriously about coming out for it next year.

the other.

Working with others takes the grace to accept direction, compromise, delay and even defeat. To be independent one must have at the same time the strength to maintain one's own standards of right and wrong, the patience to persist, the skill to persuade and motivate others, and the knowledge to come up with the best answers.

These are qualities that do not emerge spontaneously. They have to be developed by hard work and long practice. But the prize is worth the effort. If enough of your generation are willing to make the effort, you can do more for yourselves and the world than any previous generation has ever been able to accomplish. Whether the spirit of rebellion abroad in the world leads to chaos and tyranny or to the liberation of the human spirit is in your hands. [CAMPUS COLLOQUY. All rights reserved.



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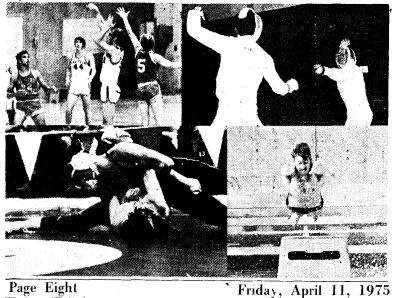
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The CALIFORNIA Tech SPORTS



Page Eight

Page Beats Fleming

by Dick O'Malley

In the true spirit of Discobolus sports, the titans of Page defeated the evil hordes of Fleming in the manly sport of handballing last Sunday. This is not to be confused with European handball, which is something else entirely.

The victory brought the jock division of PHWH&RR to within 13 points (and five more victories) of Big Red, setting the stage for the traditional final showdown two weeks before finals, assuming that the Big Blue Machine doesn't blow it in the meantime.

Individual Efforts

In Sunday's competition, Page won all four of the singles matches, losing only the doubles

set (all of which were pushed to three games). The athletes (in case anyone is really interested) performing for Fleming were Romero, Laige, Liang, and Cheng in the singles; Land and Vik in the doubles. The athletes performing for Page were Kober, Broskow, Rea, and the cute Bandhauer. Alonis and Beall also played, and lost the doubles match.

Current Discobolus standings and challenge order are: Page 22, Blacker 3, Ricketts 3, Lloyd 3, Dabney 3, Ruddock 3, Fleming 35. After a major faux pas, Blacker snuck in a challenge minutes before the Fleming ath team and will be playing Page in labyrinthspiel or something else this weekend.

Heart's Fancy Sports Menu

		Saturday, April 12	
12 noon	Baseball (2)	Claremont-Mudd	Home
1:00 p.m.	Track	Biola	Away
		Monday, April 14	
12:30 p.m.	Golf	Pomona-Pitzer	Home
		Tuesday, April 15	
12:30 p.m.	Track	CHM & Redlands	Home
3:00 p.m.	Baseball	Whittier	Home
3:00 p.m.	Tennis	Pomona-Pitzer	Home
3:00 p.m.	Tennis (JV)	Pomona-Pitzer	Away
		Thursday, April 17	
4:00 p.m.	Track	Ambassador College	Home
Lilly		nonular one) The	other was

popular one.) The other was Continued from Page Six rally! Five-year-olds do this all **Copulate Casually?** Still, our brains are rather

playful. In an on-the-spot experiment, Lilly asked the audience to concentrate on the contents of the tape. Every 0.7 seconds, for 13 minutes, Lilly's voice droned "calculate". But at the end of that time the audience claimed they heard a plethora of words (catch a leg, carefully, copulate, casually ...) Lilly: "How many of you heard just the word 'calculate'?" (Very few hands go up.) "You're the only sane people in the room-in a funny sort of way. After six hours of listening to nothing but 'cogitate', I heard 2,730 words. Of these, 340 are in a large dictionary. The rest we don't use yet."

the time.'

Among the many audience questions, two stuck in my mind. One was the inevitable "What is reality?" Lilly: "Reality is a very complicated system of beliefs, made by an observer which no one in the sciences has been able to pin down yet." (I have a feeling the question will remain a

more promising: "Are there any cultures which have practiced sensory deprivations," Lilly: "Tibetans lock you in a bare room for three years, passing food through a tiny slot and refusing to speak with you. They want you to first create a bad deity and give him your bad qualities. Then they want you to create a good deity and give him your good qualities. Then you destroy them both."

Hockey—Undefeated

Continued from Page One Diego, the team will fly to Boulder, Colorado, for the Western Regionals facing San Francisco State in round one. If Tech wins, they will play the winner of the Denver vs. Northern Arizona State series.

Prisoner

Continued from Page Five brother: very rich, very secure, very much out of New York and living in the country.

The humor of The Prisoner of Second Avenue is darker than the humor of most of Simon's other works, and seems provided only to break or modify the tension of the plot. A good case in point is Lemmon's continual word battle with the couple on the terrace above, always ending with a bucket of water in the face.

The play is larger than the comedy, and the comedy fairly glows with truths, most of them bitter. The Prisoner of Second Avenue reflects just a little shine from all of us.

–Dennis L. Mallonee



Darbs Mangle Lloyd, Ricketts

by Tom Creswell With an 8 point third quarter blitz Page defeated Fleming 34-27 in Interhouse basketball action last Tuesday.

After holding a slim 16-15 lead at the half, Page, paced by the 14 points of freshman John Pender, outscored the Flems 18-12 in the second half. Consistent rebounding as a team also contributed heavily to the victory.

Fleming RA Steve Sheffield led that team with 10 points, followed by frosh sub Jim Hickey with six. Questionable shot selection and frequent substitution characterized the Fleming second half play until finally Page built up an eleven point margin and coasted to victory.

Elsewhere in the gym the Scurves were burying Lloyd, 40 - 17.



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Tech Splits with Pomona

by Tom Creswell

Behind the strong pitching of Fleming frosh Kevin Miller and the prolific hitting of Scurve frosh Steve Eckman, the Caltech baseball team romped to a 9-2victory over Pomona-Pitzer last Monday.

Eckman got two homers and a double and 5 hits on the day (it was a doubleheader, Tech losing the first one 16-4).

Winning, up to now, has not been the name of the game for the Beavers (1-5 conference,2-10 total) but the picture in the future looks good, according

to coach Ed Preisler.

"We've got 3 good pitchers in Miller, Ed Rea (Page), and Doug Roundtree (Dabney), as well as an excellent catcher (Rick Gayle, Page), something we haven't had in recent years," Preisler commented. He also noted that Gayle had thrown out the first three men that had tried to steal second his first game, more than had been thrown out last year. •

The Beaver coach went on to comment on each position. paying tribute to his outfield (Renee Johnson, Eckman and Miller) and junior shortstop John Dilles. He also indicated that the team's spotty record was due to absences and the ensuing juggling of positions, sometimes leaving a player with which he is totally unfamiliar. The recent rains have been responsible for many of the absences, since rained-out games were frequently rescheduled for days on which players had labs, etc. Of course, there's always a

few slackers in the crowd ("I'm not here, coach.").

Starting first baseman Rick Mitchell and second baseman Greg Hoit are the only seniors on a team that has nine frosh (including backups), so that the future of the Beavers with a little luck may be a winning one.

Preisler looks for a few more wins to come this season and has higher hopes for next season.

Continued from Page Seven

downstairs in Winnett. Also, I

will be maintaining this column

during my membership as a

YMCA

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