



Today's noontime entertainment: The Paul Drescher Ensemble

Drescher to Perform

Paul Drescher and the Paul Drescher Ensemble will be making three presentations on campus this weekend, two of them for free and a third one for a low ticket price.

Drescher, an emerging name in the world of new music, will give a Noon Concert today, January 17, on the Quad. He will demonstrate stereo cassette playback and explain this technique. Immediately following there will be a premiere of the video "Was Are/Will Be" produced by the Ensemble and Target Video. This premiere will be in Winnett Lounge.

Later, at 7:30 pm in Ramo Auditorium, the Paul Drescher Ensemble will hold a technological demonstration with questions and answers. These two events are free and open to the public.

On Saturday night at 8:00 pm, the Paul Drescher Ensemble will

perform in Ramo Auditorium. Works scheduled on the program include "Dark Blue Circumstance," "Destiny," "Was Are/Will Be" and the concert version of "Slow Fire." Drescher and his ensemble use electronic guitar, keyboard, electronics, and live-tape processing to produce music that ranges from classical to rock.

The Paul Drescher Ensemble is made up of Paul Drescher on electric guitar, electronics, live-tape processing and synthesizer; tenor Rinde Eckert; Gene Reffkin on percussion; and audio engineer Jay Cloldt.

Tickets for the Ramo concert are \$12, but only \$6 for Caltech students, with \$5 rush tickets available on Saturday. Tickets can be purchased at the Caltech Ticket Office, 332 S. Michigan Ave. Call (818) 356-4652 for information.

SDI at Caltech

by Rob Fätland

Policy, Military Operations, and Technology are the official divisions of the Strategic Defense Initiative (SDI). Caltech, JPL, and the nation's academic and scientific institutions in general are involved with the Reagan administration's ambitious program of "deterrence through prevention" on at least two related levels: first as a research juggernaut relentlessly forging revolutionary science and technology under the direction of the military, instrumental to the success of SDI, and second as a loose community of individuals trying to resolve the immensely complicated political and ethical problems inherent in the SDI program.

The debates and complications in evidence everywhere around this nebulous subject of SDI seem to be of a public relations and reputational nature rather than over the propriety of what the SDI is trying to accomplish. The debate does not rage over whether it is a good idea to build a rail gun that can fire a block of plastic into an oncoming Russian missile at four kilometers per second, but rather focuses on who might be risking his or her reputation as a scientist by claiming publicly that SDI can or cannot work, or whether Caltech is or is not appearing to publicly support SDI. The public relations aspect of SDI is everywhere.

This does not imply that "the Caltech community" has accepted SDI on principle as a fine plan. In fact, more than 500 scientists from Tech and JPL signed a petition last

May strongly opposed to the idea, calling it "at best an enormous waste of scientific and financial resources."

In contrast to such an outcry consider this: Last year Caltech's own Office of Sponsored Research claimed that all SDI gave Caltech was a \$50,000 grant for Optical Signal Processing research under Dr. Dmitri Psaltis. The SDI information office claimed instead that last year Caltech got \$300,000 for Gallium Arsenide Materials research. Furthermore, SDI said that last year JPL received a \$75,000 grant for Neutral Collision Growth (?) research. Upon further investigation it was revealed that Caltech actually received both grants through SDI, one for \$75K and one for \$300K, and that this was obscured by SDI's practice of buying research contracts through other military research organizations such as the Defense Analysis Research Projects Agency. They also disclosed that in addition to the \$75,000 grant, last year JPL received an additional \$300,000 for classified research.

The point is not that there is any conspiracy to obfuscate the facts, but that Caltech is indeed involved directly in SDI. How does the Institute's administration stand? Very

carefully. Institute policy is not to take an official stand, but rather to maintain Caltech as an open forum of debate. As far as the administration is concerned, research proposals must meet only three standards: there must not be restrictions at any time on publication, there must not be classified work done on campus at any time, and the proposed research must not be a dumb idea. That's it. Any further restrictions are up to the scientist contemplating taking on a project.

Has SDI got projects available? Believe it. SDI has projects coming out of their eyes. Dr. James Ionsen, head of the SDI Office of Innovative Science and Technology, came here in December to present an overview of SDI research. Ionsen began his talk by stating that he was not at Caltech to discuss SDI policy, or SDI military operations, or any of the five offices within the Technology Division concerned with the various phases of a missile's trajectory. He was here only as a distributor of funding from the sixth office of the SDI Technology division, that of Fundamental Research. He proceeded to touch on the work in progress today that will continue for at least

continued on page 4

BOC Talks

The Honor System plays an important role in the life of the Techer, yet it's not a topic most students think or even know much about. This raises some serious questions: How effective is the Honor System? What are the problems with the present policy? What sorts of changes would improve the effectiveness of the Honor System? The *California Tech* invited the BOC to discuss this fundamental part of student life.

The following is based on a discussion that took place in the Master's office on 14 Jan. Present were:

- Peter Ashcroft, an editor of the *Tech*
- Pam Feldman, the BOC secretary and former Ruddock BOC Rep
- Fred Ferrante, the BOC Chairman and former Rep-at-Large
- Sue Hannaford, a *Tech* writer and former Blacker BOC Rep
- Michael Keating, the Page BOC Rep
- Drew Lindberg, the Ruddock BOC Rep
- David Nice, the Ricketts BOC Rep
- Sam Wang, a Rep-at-Large

Sue: I'd like to start with a point that Tim Allen raised last year when running for BOC Chairman; he stated, based on his experience on the board both as secretary and as a voting member, that the honor system wasn't being taken seriously by the students, and he proposed a harsher line— that if a person be caught committing a violation

s/he be kicked out, no second chances given. I guess what I'm asking is, based on your own experience, do you think the honor system works?

Pam: It seems to me that you've raised two issues: (1) whether there is a lot of cheating going on [which I personally don't believe to be

continued on page 2

Kreitler Speaks on King

by Mike Goedecke

Martin Luther King exerted a uniting moral force upon America's social conscience in the 1960's which is far-removed from the divisive political self-righteousness of today's television evangelists. This was the basic theme of a presentation Wednesday in honor of Dr. King's birthday, given by Father Peter Kreitler of the group People for the American Way. The

program was co-sponsored by Hillel and the Caltech Y, the latter of which, incidentally, sponsored a three-day stay at Caltech by Dr. King in 1958.

In his presentation, Fr. Kreitler contrasted King with such people as Jerry Falwell, Jimmy Swaggert and Texas evangelist James Robinson. King preached acceptance and equality of all people— not just blacks, but also all Christians, Jews

and other racial and religious groups. One of the evangelists was quoted on Kreitler's video presentation as saying, "God doesn't listen to Jews because they don't believe Jesus was the true Messiah." King used scriptures and the teachings of Mahatma Gandhi to promote passive resistance as an effective weapon. Today's evangelists use television and the Bible to ask for donations and spread their ideas of good and bad and extend political influence, Kreitler said. Another example from the videotape: "We want to teach people what to think, not how to think..." The tape also described an instance of book-burning in St. David, Arizona, where the school committee at first banned Golding's *Lord of the Flies*, and then in a second motion, all of one teacher's required reading list. According to Kreitler, groups like the Moral Majority (now the Liberty Federation) focus these efforts in states like California and Texas. These states are large enough that when a publisher revises a book there, it revises that book everywhere, and thus the evangelists' influence spreads throughout the country.

There was a spirited discussion after the videotape, which brought out another important point. Martin Luther King used a positive, "follow me" approach, while today's TV evangelists often adopt a more negative, "they're evil because they're not like us" attitude. Kreitler's message again: King tried to unite everyone, while current evangelists seek to unite only the specific groups and turn them into sheep, while actually dividing America as a whole.

ASCIT Nominations

—Nominations are still open for ASCIT president and treasurer; they will close 5 p.m. Tuesday, January 21.

—Statements for the Tech are also due January 21.

—Nominations should be sent to Lisa Cummings care of the Dean's office (102-31). For more information contact Joy Watanabe (RI-32) or Dave Bruning (PA-115).

Joy Speaks Out

Recognizing the importance of the coming ASCIT elections, and especially that of ASCIT President, the Tech asked incumbent President Joy Watanabe how she would describe her duties. The following is a summary of her reply.

Perhaps the first concern that comes to the mind of a person considering the office is the time commitment. While the time required can be as little as two hours per week, a more realistic estimate is in the range of five to fifteen hours per week.

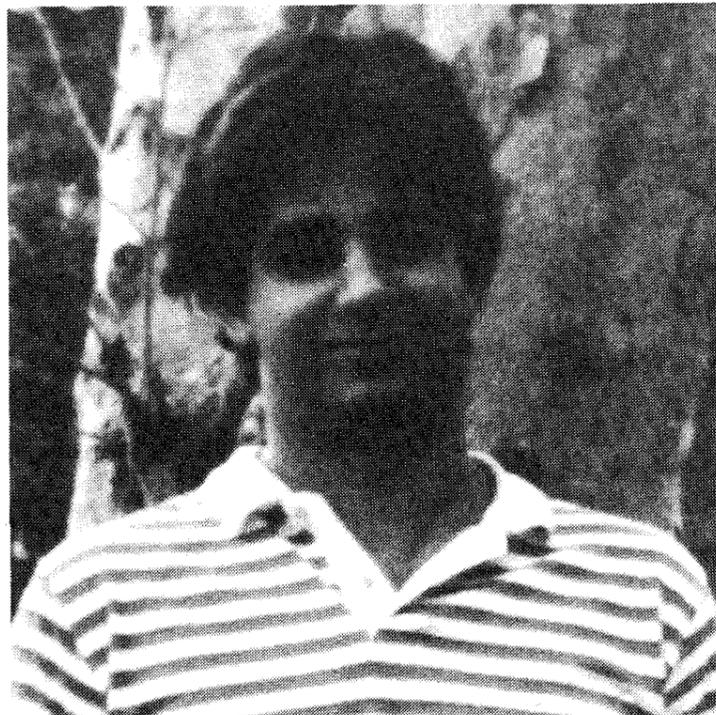
The duties of the President are largely administrative, and this is most evident in relation to ASCIT BOD meetings. It is the responsibility of the President to prepare

an agenda for these meetings as well as contact those who should be there.

In addition, there are monthly faculty board meetings. The President represents the interests of the student body to the faculty in this context, as well as serving on the Alumni-Faculty-Student Relations committee and the Admissions Support Committee.

Other less structured tasks are such things as holding Excomm meetings and working with a Presidential Committee. It is ultimately the responsibility of the President to oversee the operation of the Coffeehouse and the ASCIT Publications Empire, which includes the *Big T*, the *little t*, and

continued on page 4



Fred Ferrante, Captain of the Guard, Defender of the Faith, and Chairman of the Board of Control.

photo by Kent Noble

OPINION

BOC

from page 1

true]; and (2) whether the manner in which the BOC handles cases has any effect on the number of honor system violations committed.

Sue: Aren't there students who feel that the board won't throw them out on a first offense if they admit to it and say that they are sorry?...

Fred: I seriously doubt that anyone goes out and commits an honor system violation with the idea that the board will go easy on them. The majority of cases we see involve students who break under pressure, not premeditated actions.

Pam: I agree. I know of several people that have been surprised at what the board does to them, but none that expected to get away free.

Fred: Most schools that do have honor systems are more severe than we are. For example, at UC Berkeley, if a professor suspects a student of cheating, he gives that student an F. The student can then appeal it.

Peter: Could you tell me how many cases you see?

Fred: I've got the data from 1976 on. Breaking it down by chairman it goes Gromley 3, Sexton 8, Sirri 15, Jensen 5, Dunkeld 34, Lambert 20, Chivukula 27, Sutton 39, Ferrante 23. It varies. In the larger numbers there are probably more

From 1930 to 1970, there were, on average, five cases a year... Recently it's plateaued at about twenty cases.

small cases and non-academic cases. To be honest, there seems to have been a jump. From 1930 to 1970 there were on the average 5 cases a year; from 1970 to 1980, about 10. Recently it's plateaued at about 20 cases a year.

Peter: Do you attribute the increase to more non-academic cases, or are people more dishonest?

Fred: It's hard to say. I don't know how other chairmen handled non-academic cases...

Peter: What percentage of violations are academic?

Fred: I'd say 1/2 to 3/4.

Peter: What about the number of cases brought before the BOC and the number of cases you investigate but drop?

Fred: Well, the majority of academic cases get heard. Non-academic cases are sometimes handled by the Master or the Dean directly.

Peter: How much out-and-out cheating do you think there is that's not being caught?

Sue: From my own experience on the board, I feel that there must exist people out there who are cheating...I can't believe that the only violations which are being committed are pressure violations—the kind that often come before the board.

Fred: There was a survey done 6 years ago in which the students weren't required to write their names, etc. They found that only a third of the violations committed came before the board.

Pam: Things like going over time...We've never caught anyone for just going overtime on a test. That's easier to justify, too, than cracking a book on a closed-book test or copying someone's paper. You can say "I had to go to the bathroom, so I can really work 15 more minutes" or, "I'm not feeling well, so it's taking me longer to do this than it should..."

Peter: In light of the fact that a possible 2/3 of all violations are unreported, what improvements do you think could be made in the board and honor system?

Fred: The main area is homework policies. The spirit of the homework policy seems to get violated a lot.

Michael: It's the area that's most open to interpretation by the student in a convenient manner.

Sam: There should be better communication between students and profs.

Pam: I think every prof should state what his policy is at the beginning of the class. I've been in classes where the prof has never mentioned what the policy for homework is—we just assume it's collaborative.

I think every prof should state what his policy is at the beginning of the class.

Peter: If you could change one thing about the board what would it be?

Drew: Well, people I talk with are always upset about the vagueness and secrecy of the board. It seems that the BOC could issue some general policy statements on what specifically you cannot do and what will happen if you do those things. It's something I'd like to change but I can't think of a good alternative.

Michael: But putting down rules prompts the search for loopholes in those...

Fred: I don't think it's necessary. People coming to Caltech have a basic knowledge of what's wrong. They should know not to cheat or steal. One thing that annoys me is that the BOC used to go visit houses and then answer general questions. The questions of secrecy and other business never really get discussed.

Peter: I'm always impressed with the fact that very few if any people complain about being condemned unjustly by the board.

Michael: There are people who feel that way when they are convicted but never say anything

because they feel it would do no good. Also, by the time they go to talk to the Dean (usually the day after the conviction), they've had time to think about the board's reasoning and they are not so mad. And then there are some who are so happy that the board's decision was not to throw them out of Caltech that they're actually glad.

Sue: Are there any cases you don't feel comfortable handling?

Fred: I don't feel comfortable handling cases where the person is on the edge. Sometimes the person really would be better with professionals; putting them through an investigation would be too much pressure. Situations have occurred where I've been informed by the Master or the Dean that a problem is being taken care of by them.

Peter: How about interhouse pranks or problems?

Fred: Well, in some cases I think it's better handled by the IHC or House officers or the MOSH.

Sam: There's a problem with the BOC and that's that you can't talk about the violations. With an Interhouse thing often you want to hold up an example to other houses.

...putting down rules prompts the search for loopholes...

David: And when there's a large number of people involved...

Fred: We won't convict an entire house.

Sam: It might be nice if there were something in the *Tech*—not a publication of the minutes—but maybe an "Ask Fred" column or something...

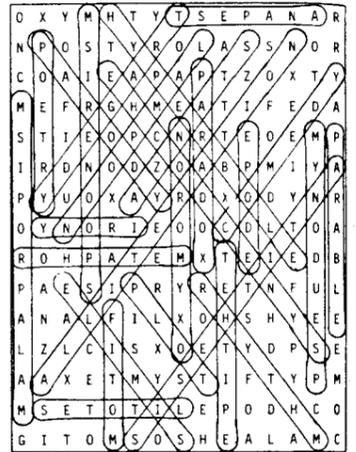
Fred: The problem with publishing

cases in the *Tech* is that the board is not a static thing; it changes with the people on it.

Drew: What about grad students? I've heard rumors that they commit more violations than the undergrads.

continued on page 4

January 10 Solution



THE CALIFORNIA TECH

Volume LXXXVII • Number 13
17 January 1986

EDITORS

Paul Gillespie • Peter Ashcroft

FEATURES EDITOR

Steve Molnar

ENTERTAINMENT EDITOR

John Fourkas

PHOTO EDITOR

Kent Noble

SPORTS EDITOR

Michael Keating

REPORTERS

John Beck • David Bruning
Doug Gray • Jim Bell
Diana Foss • John Haba
David Hull • Bibi Jentoft-Nilsen
John Mann • Steve Gómez
Ed Zaneli • Marty Zimmerman

PHOTOGRAPHERS

Matthias Blume • Teresa Griffie
Chris Meisl • Rod Van Meter
Min Su Yun • Sing Ung Wong

THE INSIDE WORLD

Blacker: Jim Bell
Dabney: Mike Roberts
Fleming: Matt Himmelstein
Lloyd: Nicole Vogt
Page: Cynthia LePage
Ricketts: Saxy Workman
Ruddock: Sam Wang

BUSINESS MANAGERS

David Goldreich • Jed Lengyel

CIRCULATION MANAGERS

John Hart • Sunbo Choi

PRODUCTION

Robert Horn • Nick Smith

PROOFREADER

Theron Stanford

THE CALIFORNIA TECH

107-51 Winnett Student Center
California Institute of Technology
Pasadena, California 91125

Phone: [818] 356-6154

Published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and do not necessarily reflect those of the editors.

Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. The editor reserves the right to abridge letters for expediency.

Turn in copy to the *Tech* office mailbox, room 107 Winnett. The deadline for copy is Wednesday at 5PM; for announcements, Tuesday at 5PM. Late copy may not be printed unless prior arrangements have been made with the editor.

Subscription requests should be directed to the attention of the circulation manager. Rates are \$6.00 per annum (one year), or \$100.00 per life (many years).
Printed by News-Type Service, Glendale, California

ISSN 0008-1582

The Caltech Y Fly-by

Friday... January 17

Noon Concert—electronic music on the Quad. Bring a friend and an Armadillo.

Wednesday... January 22

Noon Update—"Patents and Copyright at Caltech." Discussion with Ed Ansell, Director of Patents and Licensing. Winnett Clubroom #1, at 12 NOON. Bring a lunch.

Friday... January 24

Noon Concert—Irish Folk Music on the Quad with Mick Moloney, James Keane, and Robbie O'Connell. Bring a friend and a Shamrock.

L.A. Philharmonic—Music by Sibelius: Symphonies Nos. 1 and 7, Violin Concerto. Tickets are \$3 each. Concert starts at 8 PM.

Saturday... January 25

Sailing Trip! Probably leave Caltech at 7:30 AM. Be on the high seas all day with your skipper, Don Skelton. \$9.

Tuesday... January 28

Look at pictures taken by Voyager and see the Voyager Control Room. Free trip to JPL, sponsored by the Y. 8 PM. Sign up in the Y.

Movies! Movies! Movies!

The Y has discount passes to the Pacific and Mann Theatres! Passes are \$3 each and are good for 1 year.

Any questions, comments, or ideas?
Come see us in the Y office or call x6163

Greg Susca
Painting and Wallcovering
Interior and Exterior
(818) 249-5646
License #456757
Special discounts to Caltech community.

THE ASCIT MOVIE
TONIGHT at 7:30 and 10:00

Walt Disney's
Pinocchio

Next Week—The Killing Fields
in Baxter Lecture Hall

\$1 ASCIT members

\$1.50 all others

IHC Highlights

by John Beck

The format for Interhouse football has been changed from two-hand touch to flag. It is hoped that the use of flags will greatly reduce the uncertainty as to whether or not a player has been downed. Any complications caused by this rule change will be handled as the need arises.

The pros and cons of replacing the pay phones in the alleys of student houses with campus exten-

sions were discussed at length. Campus extensions have the advantage of being able to call anywhere in the 213 or 818 areas without charge. They have the distinct disadvantage of being inefficient and slow when calling long distance. For long distance calls, there is no significant cost difference. The following off-campus houses have been approved as off-campus alleys for the following houses:

255 S. Hill Bl.
290 S. Holliston Ri.
297 S. Holliston Pa.
1052 Del Mar Ru.

Several houses have reported sightings of unfamiliar people roaming the halls, and there have been unidentified off-campus persons as well. If you spot anyone who looks out of place, don't be afraid to ask him what his business is. If necessary, call security at x4701.

The Housing office has handed the job of undergraduate house maintenance to the physical plant. If you have anything needing attention (leaky faucet, broken window, burned-out bulb, etc.), give them a call at x4717.

The Inside World

Dabney: (Ring)

—“Hello?”

—“Yeah, Bill, it's Arthur, I'm...sorry to disturb you we've got an emergency. It looks like a takeover. We're trying to rally the whole board, and the meeting's in forty minutes. Bill— everything is riding on your vote; can we...can we count on you to make it?”

(Revv...screech)

—“Mercedes-Benz... when you simply *have* to be there.”

—“J”

Page: Now we may determine the veracity of the RED FRAT Boy's killing claim: an 11-1 kill to be killed ratio (??) is a transparently poor piece of braggadocio, even for a frat brother. Common sense alone, demands that his buffoonish mouth be painted with a red smile. But it's unlikely we'll ever know, since the girls south of the Olive Walk will find an excuse not to accept

Ice skating with the Rudds: Everyone aches, but had incredible fun.

Be warned: the Syndicate phone is reserved for Syndicate members. Extensive use by non-Syndicate members yields weltd patrons. Wear goggles!

—Cindy

Ricketts: “The cosmic space gum will bring peace to the universe,” said Space Commander Zokar. Back on earth:

Welcome to the waiter's corner: Swaka seizes the hockey stick and THE POWER! Welcome New Guys! Think: “Quick, Quick, Quick.” Samer is not only paranoid, but he's also a real turkey wad. He keeps taking Joy's seat at dinner and upsets all of the unvers. Saxy left us to serve the Blacker Moles. He sped up their dinner, they were done before the Darbs and the Flems. (Yeah! The Blacker Moles were done!)

Alas, the bird still flies— bringing hours of merriment to all. Even Dr. Brennen was spotted testing out his gymnastic skills.

To that Guy: “Dope smokin' moron, don't make me yawn.”

—Saxy and Joy

BUY YOUR
CALTECH CARD AND SAVE

CALTECH'S BURGER CONTINENTAL

- GOOD FOOD
- REFILLS ON SOFT DRINKS AND SALAD BAR
- UNDERGRADUATES PLEASE ASK FOR YOUR SPECIAL MEAL RATES
- YOUR HOST FOR ALL YOUR NEEDS

FOR THE ENTIRE MONTH OF JANUARY

A FREE ROOT BEER FLOAT TO ALL JUNIORS, SENIORS, AND GRAD STUDENTS

FACULTY, GRAD STUDENTS, ATTEND!

B.C.: ON LAKE AVENUE

MONDAYS AND TUESDAYS ARE BEER DAYS. HALF PRICE ON BEER.

½ BLOCK NORTH OF CALIFORNIA

Dangerous Visionary

by David Hull

Harlan Ellison, aside from putting on quite an entertaining show, is a very serious person. By his own admission, he is incapable of keeping his mouth shut when principle is at stake. Moreover, he takes things personally. (He'll probably take *this* personally, in which case I may never write again). And he'll talk your ears off. One person I was with described him as “the Grateful Dead of the lecture circuit,” and worried that I hadn't eaten a hearty breakfast to sustain me. It brought back memories.

During my senior year in high school, I had attended an Ellison lecture at the University of Kansas titled “I Will Now Rag on Jerry Falwell for a Long Time,” or some such thing. At that time, I was also reading as much of the *Dangerous Visions* series as I could get my hands on. (If you haven't read *Dangerous Visions*, go out and do so now. I'll wait.) (Now where have I heard *that* before?) *Dangerous Visions* (along with *Again Dangerous Visions* and *The Last Dangerous Visions*) is an anthology of high-quality fiction that could not have been published anywhere else. Although the actual stories are written by dozens of different authors, each has an introduction written by Harlan himself. As a result, the books are so permeated by Ellison and his Intensity (they should be introduced as a couple—this is Harlan Ellison, and on his left, his Intensity) that after reading them I felt like I knew the man personally.

Of course that's sheer nonsense, but a writer cannot help projecting himself into his work, and a reader can hardly help picking up on it. Ellison does more than project himself into his work. He fairly projects himself out of the page and into your face.

Knowing what I did about Ellison, I suspected that a better title for this talk would be “Why I Quit *Twilight Zone*” rather than “Writing Fantasy to Promote Reality.” To be fair, I did suspect that the latter might creep in.

As it happened, Ellison stayed fairly close to his stated topic while still putting on a helluva show. After a bout of introductions, with Al Hibbs of JPL fame holding his own, we were treated to a fairly

pointless clip from *The Merv Griffin Show*. (Did you know that astrology has no scientific basis? Well Harlan knows too, and he's not afraid to tell Merv and the teeming millions about it.) There then followed another skirmish of introductions, and then the spiel.

Spiel is Yiddish, from the German for game. When a musician plays, that's a spiel. When a hawker tells you why you should buy his wares, that's a spiel. When Ellison gives a lecture, that's a spiel.

At times he used words that have already failed to get past this publication's stalwart editorial policy, and which are therefore best left to the imagination of the Gentle Reader. He told us interesting names for his sister and in-laws. He brought up high ideals and took pot shots. He told stories (including the one about why he quit *Twilight Zone*). He incessantly invoked the names Phyllis Schlafley [sic] and Jerry Falwell as though he were trying to induce some sort of Pavlovian response. (One can imagine the converse: “Harlan Ellison!” screams the Reverend Jerry, and thousands of True Believers foam at the mouth.)

He recommended reading all of Sir Arthur Conan Doyle's “Sherlock Holmes” stories, in order to learn the skepticism and inquiring attitude needed to separate fact from fiction. And in between it all he told about the value of fantasy.

Fantasy at its best holds a mirror to reality. When you see reality through that mirror, you see it from a different angle, and you see things you hadn't seen before. You watch the brutal behavior of the characters, and wonder how anyone could do such things, and then you realize it could be you. You breathe a sigh of relief that it can't happen here, and then you see it in your own backyard. You read of the incredible nobility and integrity of a character, and realize that that, too, could be you. You wonder why our world couldn't be like that, and then become aware that it could be closer than you thought.

The value of fantasy is to get people to think, and to realize their potential. Imagination is a powerful tool, and good fantasy lends you

continued on page 5

FREE DELIVERY

Ingredients:

- Pepperoni
- Sausage
- Salami
- Meatballs
- Canadian Bacon
- Ham
- Anchovies
- Mushrooms
- Black Olives
- Bell Peppers
- Onions
- Tomatoes
- Pineapple
- Jalapeños
- Garlic



PIZZA

Beer & Wine

Sandwiches

Salad Bar

Daily Specials

CALL 792-5984

524 S. LAKE AVE. PASADENA

Just north of California

ALL YOU CAN EAT SPAGHETTI FOR ONLY \$2.99

10% DISCOUNT WITH STUDENT ID

NOT VALID ON DELIVERY OR ANY COUPON OFFER.

**\$2.00
OFF
Any Large
Pizza**

ONE COUPON PER PIZZA
COUPON EXPIRES 1-24-86

**FREE
6-Pack Soda
With Minimum
\$10.00 Purchase**

NOT VALID WITH ANY
OTHER COUPON OFFER.

ONE COUPON PER PIZZA
COUPON EXPIRES 1-24-86

**\$3.00
OFF
Any Large
Pizza**

Minimum of 3 Toppings

ONE COUPON PER PIZZA
COUPON EXPIRES 1-24-86

BOC

from page 2

Fred: The Graduate Review Board takes care of that. I think they meet once or twice a year.

Sam: My impression was that they met as needed.

Fred: Well, they do, but I knew a chairman who had never met... The education the grads receive pales in comparison to what the undergrads receive.

Sam: Grad students also have a very different life. They don't take very many courses, if any. The grad students I've talked with are much less concerned about the undergrads cheating than they are for their lack of respect for labs. They complain about the vandalism undergrads commit.

Sue: What are your feelings about being on the board? I know that now that I've been off the board for a while I have mixed feelings—part of me is glad to be through but other times I really miss it.

Sam: Being on the board is more than a job; it's a way of life... You get to know the people on the board really well in the search for truth..Oh God, you're writing all this down...

It might be nice if there were something in the Tech...an "Ask Fred" column.

Fred: One of the things I first noticed when I got on the board was the responsibility. Deciding whether a person should be allowed to remain at Caltech...well, to some people it's the most important thing in their life..you have to sit and decide the future of people. That's hard.

Sue: Fred, Pam, how do you feel about being chairman and secretary versus the voting member?

Fred: My job of chairman is very rewarding. I get to interact with the

JOY

from page 1

other scholarly publications.

Much of what makes a good President consists of simply being aware of student opinions and desires. Through cooperation with administrators such as the Deans or the MOSH, real improvements can be made in the "quality of life" here. In exchange for the work involved, the President can have the satisfaction of having been part of that process and of having actually seen his or her ideas reach fruition. As if that weren't reward enough, the job comes with its own telephone, and soon will have an office, too.

Teaching Awards

The faculty members chosen to receive Teachings Awards this year are Yaser Abu-Mostafa, Glen Cass, Eugene Cowan, Fred Culick and Jerome Pine. This group was chosen based on the TQFR survey responses and represents the sentiments of the entire student body. Plaques will be presented at the spring faculty conference. Congratulations to the winners!

faculty and the Dean. As chairman, my job is to do the investigation, ask the questions, and then report our decision to the Dean and professors.

Pam: I think the investigation stage is critical. Sometimes at the preliminary investigation the accused is really scared and denies everything. If we can make them confess it's a big help. Otherwise, a few days may pass before the board hears the case, and in that

You get to know people on the Board really well on the search for truth.

time they may have hardened their story and locked themselves into a lie.

Sue: I know I never wanted to be in one of those positions; I think it would be too frustrating to sit in on a case and not be able to vote for what I thought to be the right side.

Fred: I've never missed the ability to vote.

continued on page 3

SDI

from page 1

the next six years, driven by 33 billion dollars worth of funding.

An example is the following: A 20% efficient, six megajoule Electromagnetic Rail Gun has been built which is capable of firing a 110 gram projectile at .5 kilometers per second (or faster) without frying itself in the process. The energy for firing the device is stored in colossally huge capacitors. The aim is to eventually lift the whole assembly into space, so they are trying to shrink those capacitors in size without diminishing the amount of energy they can store. Research money is going into new materials with higher dielectric constants, into porous carbon with large surface area, into fast epitaxial layering (sputtering) processes, and so on.

SDI needs major innovations in rocket fuels, in composite materials, in sensory equipment, phase conjugate optics, and of course in extremely powerful excimer and free electron lasers. They need refrigerators the size of a thumbnail which can crank down to below 70 Kelvin. They are interested in artificial barium comets, in part because things can be hidden within artificial barium

comets. The list of projects goes on.

Ionsen gave assurances that research will remain completely unclassified, which is very likely considering that as a new agency, SDI is under close public scrutiny and needs to establish a reputation of consistency in dealing with the scientific community. In fact, an SDI contract, like other government sponsored basic research, would tend to be less restrictive than a contract offered by a private industry such as IBM, with financial interests to protect and innovative progress secrets to keep. Yet there seems to be a vague unease that the classified lid would come down if a breakthrough were to occur, or that SDI will aggregate a large number of its carefully directed "goal oriented research" results and scurry off to a dark castle to build some terrible classified device. This is the sort of thing which could happen with any kind of research, of course. The government of the United States has the power to intervene in anything which affects national security, regardless of who is funding it, but SDI is disproportionately suspect, as it is a controversial new program prominent in the public eye.

This has worked to the United States political advantage in one respect: The Russians believe we are serious about SDI, at least on

a rhetorical level, and are willing to bargain it away. The other clear advantage of SDI-sponsored pure research is the major technological innovation it will bring about, with spinoffs rivalling those of the Apollo program, while simultaneously pumping money into the economy.

The Caltech administration recently *did* address the SDI issue in response to a statement made by Ionsen that Caltech was part of a nine-university "consortium" which had been recruited by SDI expressly to develop a new breed of light-based supercomputers. Caltech President Marvin Goldberger denied the existence of such a consortium in a letter to Defense Secretary Caspar Weinberger. Dr. Goldberger went on to say that Caltech's closest relationship to optical computing was a proposed \$50,000 subcontract from the University of Dayton Research Institute, which was of course the grant provided by SDI through Dayton alluded to above. The public relations aspect of SDI is always present, owing to the continual media coverage of SDI-related events and the immense skepticism over its technical feasibility. The public relations game and the inherent emotionalism of weapons research and politics threaten to obscure and oversimplify what is really happening with SDI.

Juniors, Seniors & Grads... GIVE YOURSELF SOME CREDIT!



- Just bring a copy of your school I.D.
- No cosigner required

APPLY NOW ON CAMPUS!

Friday 17th: 12-1 PM on the Quad
Monday 20th and Tuesday 21st
Applications available
in The Y Office

CITIBANK®

Citibank (South Dakota), N.A. Member FDIC

ENTERTAINMENT

Movie Review

Movie of the Year?

by John Fourkas

Brazil
by Terry Gilliam
United Artists release

If United Artists is trying to get as much publicity as possible for *Brazil* without spending any money, they're doing a good job. Although the film was completed a year ago, Terry Gilliam has been battling loudly with UA over the film's release for just as long. It seems that the studio wants a shorter, less depressing movie, but Gilliam won't budge. He even took out a full-page ad in *Variety* complaining about it. A few months ago, he secretly showed a copy of *Brazil* to the Los Angeles film critics, who ran out and voted it "Movie of the Year". Oh yeah, and it's been out in Europe for ages.

As an offshoot of all of this, *Brazil* is now enjoying a limited engagement in this area (Westwood, Beverly Hills and Newport Beach, to be exact). There's no telling how long it might

be here, but it seems likely that it will be different when it returns. With all of this in mind, how good is *Brazil*?

First of all, *Brazil* is no Monty Python movie. Sure, Michael Palin is in it, but Monty Python it is not. Perhaps *Brazil* is best described as a glimpse at Terry Gilliam's serious (read "cynical") side. The action takes place "somewhere in the 20th century", and that somewhere seems an awful lot like 1984. Of course, Gilliam's world isn't exactly that of 1984; he couldn't have had any fun with that. I doubt that George Orwell ever envisioned any vigilante air conditioning repairmen in his world... Still, it's impossible not to draw parallels. *Brazil*, for instance, is full of 1984ish propaganda posters, and the "enemy" is the Ministry of Information Retrieval. And the hero (whose name is Sam, but not Winston) is in love with a girl and...

If *Brazil* seems at first to be a

whimsical view of this world, by the end of the movie it seems that the initial lighthearted feel of the film is calculated to counteract some of the inevitable depression at the end. Where George Orwell used hope, Gilliam uses humor, albeit an often dark variety. Whatever moods *Brazil* may create, it is clearly a film with a MESSAGE.

Is *Brazil* really the Movie of the Year? I don't think so (I'm partial to *Blood Simple* and *Out of Africa*). Even if the award was perhaps premature, and even if *Brazil* isn't quite so new and original as it's made out to be, it is worth seeing while you can. Who knows what it will be like when it arrives the next time. One tip—buy your tickets a couple of hours early, and be prepared to stand in line.

Ellison

from page 3

someone else's to complement your own. Ellison saw *Twilight Zone* as a chance to promote this idea of fantasy (not to mention a chance to give Jerry Falwell ants in his pants), and even without him it still has that potential. And as long as Ellison (among many others) is still alive and kicking, there will be other chances.

Of course, there is more to life than Harlan Ellison (even Harlan may suspect as much), and fantasy alone won't save the world. And lest you think that some kind of religious experience took place last Sunday, let me assure you that it was mostly just a lot of good fun. Not good *clean* fun, mind you, but fun nonetheless.

from page 4

Pam: I have. There have been times when I've been frustrated; especially when my vote would have been the deciding one.

Peter: ASCIT elections are coming up soon. Do you think the nature of the board will change with the election of a new chairman?

Fred: The chairman usually comes from within the board so they are familiar with procedure, so there

BOC is not a verb.

won't be radical changes. But there are seven seniors on the board right now; changes will occur with the election of new members.

Sam: But elections are staggered to minimize the effects of the changeover.

Fred: There's also the selection of the BOC Reps-at-Large coming up. It's a good experience and, historically, frosh and sophomores have done really well.

Sam: The potential problem with house officers is that it can turn into a popularity contest. BOC Reps-at-Large tend to balance the board.

Peter: Is there anything you'd like to add?

Drew: BOC is not a verb.

Sam: Yeah, and there's no such thing as a BOC violation. BOC violation, my ass! I've never been violated.

Movie Review

A Jewel

by Nick Smith

Jewel of the Nile

Directed by Lewis Teague

I usually don't like sequels. In a few cases, when there is a good story left untold, it's worth doing a sequel, but let's face it, for every *2010*, there are a dozen *Jaws II*'s. When I heard that a sequel to *Romancing the Stone* was being filmed, my first reaction was "Oh no, now they're going to ruin it!" Fortunately, I was wrong.

Jewel of the Nile is a very funny film, and if you don't take the villain seriously, it's a very enjoyable one. Michael Douglas, Kathleen Turner, Danny DeVito, The Senegal National Dance Company and the Flying Karamazov Brothers team up to make a remarkable film that, while not quite as good as *Romancing the Stone*, is still very much worth seeing.

The story picks up a few months after *Romancing the Stone* ends: our hero and heroine are on a trip around the world on the sailing vessel you saw at the end of *Stone*. Joan Wilder is using the trip to make public appearances (after

continued on page 6

SEARS Credit Card

Sears, Roebuck and Co.

0 00000 00000 0

M LEWIS

0000

Use This Credit Card In Any Sears Store Anywhere

Juniors, Seniors, Graduate Students

Establish a good credit rating now. Apply for a Sears Credit Card while you're still in school.

There are a number of benefits you'll receive by applying for a Sears Credit Card as a student. As you may know, credit grantors may assess your qualifications differently after you graduate.

- You will have been in your new job only a short time.
- You may have lived in your new residence only a short time.
- You may be earning an entry-level income.

All of the above are good reasons to apply for your Sears Credit Card now — while you're still in school.

A Sears Credit Card can identify you as a responsible adult to other credit grantors

If you are a responsible person, with the ability to pay bills, Sears believes you deserve credit. And a Sears Credit Card could be your first step in establishing the credit you'll need in the future.

Here are a few of the many benefits you'll receive with a Sears Credit Card:

- There's no annual fee or hidden credit charges with a Sears Credit Card and everything you purchase is backed by Sears famous promise, "Satisfaction Guaranteed or Your Money Back."
- Wherever you live, travel, or move, your Sears Credit Card is good at more than 3000 Sears Retail and Catalog stores coast to coast.
- With a Sears Credit Card, you can stretch your payments over a period of months, if you wish.

A Sears Credit Card can be used to purchase items you'll need after graduation, such as a new business wardrobe for interviewing or furnishings for your new home.

Apply for a Sears Credit Card right on campus

Applications available in The Y Office.

There's more for your life at
SEARS

Life's little Necessities

Egypt, Land of the Pharaohs: The first Armchair Adventure of 1986, narrated by Frank Carney. Beckman Auditorium. Friday, January 17, 8:00 pm. \$7.00, \$5.50.

Paul Drescher Ensemble: An interesting minimalist musician who works with guitar, keyboard, and tape processing. Ramo Auditorium. Saturday, January 18, 8:00 pm. \$12.00 (General Admission)

Colorado Quartet: Another Coleman Chamber concert. Beckman Auditorium. Sunday, January 19, 3:30 pm. \$15-\$13.50-\$12-\$10

Fulfilling the Wishes of Huey Lewis—Designing Drugs, Catalysts and Materials Using Graphics to Watch Molecules Do Their Thing: As the title suggests, Wild Bill at his best. Yep, he's giving a Watson Lecture. A must for frosh who don't know what they're missing. Beckman Auditorium. Wednesday, January 22, 8:00 pm. FREE.



PARIAN TRAVEL

Caltech Officially Approved

Most courteous, economical and efficient service for your **official** and **personal** travel needs.

Free service to you.

For an introductory offer a **complimentary \$50.00** worth of fine dining checks will be offered with the purchase of min. \$100.00 travel tickets (one per family).

(818) 577-8200

468 S. Sierra Madre Boulevard, Pasadena

Financial Analyst Positions

Salomon Brothers Inc wants to hire bright, ambitious undergraduates to work as Financial Analysts in our Finance Departments. No particular experience is required and degree candidates for any major are welcome to apply. A description of the financial analyst position is on file at the placement office. Please send your resume and a cover letter by February 5, 1986 to:

Christine A. Simpson
SALOMON BROTHERS INC
One New York Plaza
New York, New York 10004

Responses will be sent to all applicants by early March 1986.

Equal Opportunity Employer

Salomon Brothers Inc

Market Makers and Investment Bankers

Pasadena Scientific & Technical Books

SPECIALIZING IN ALL
SCHOLARLY & PROFESSIONAL
BOOKS & SPECIAL ORDERS



FEYNMAN LECTURES
3 VOLS. (PAPERBACK)
25% OFF

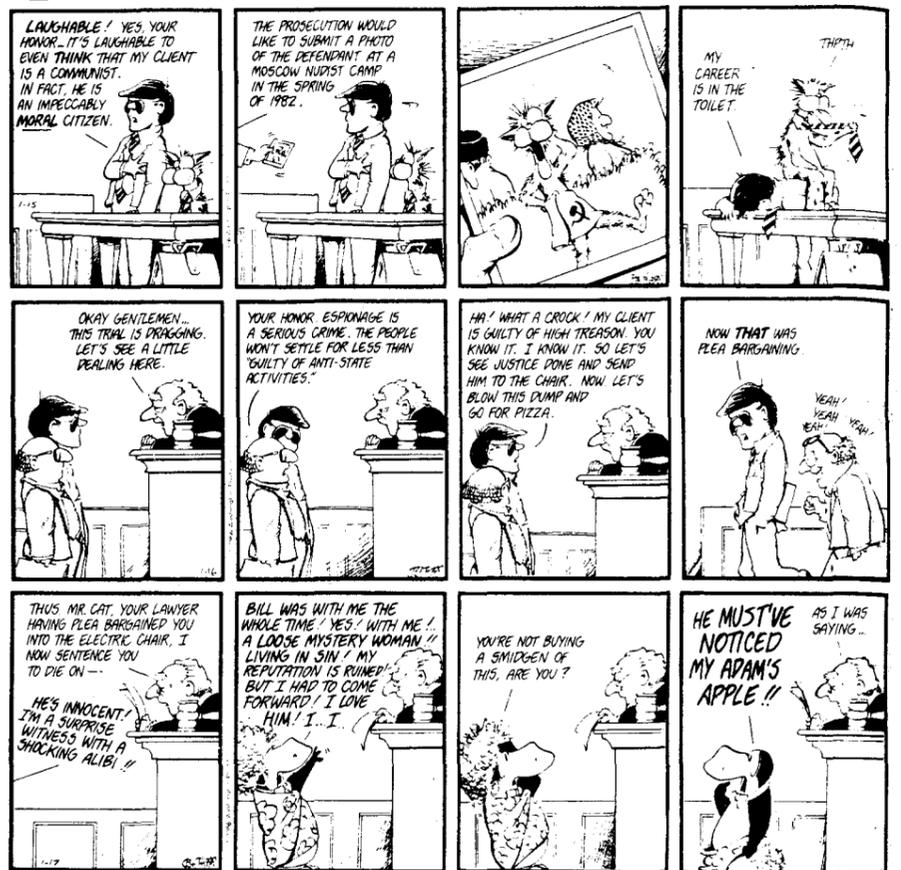
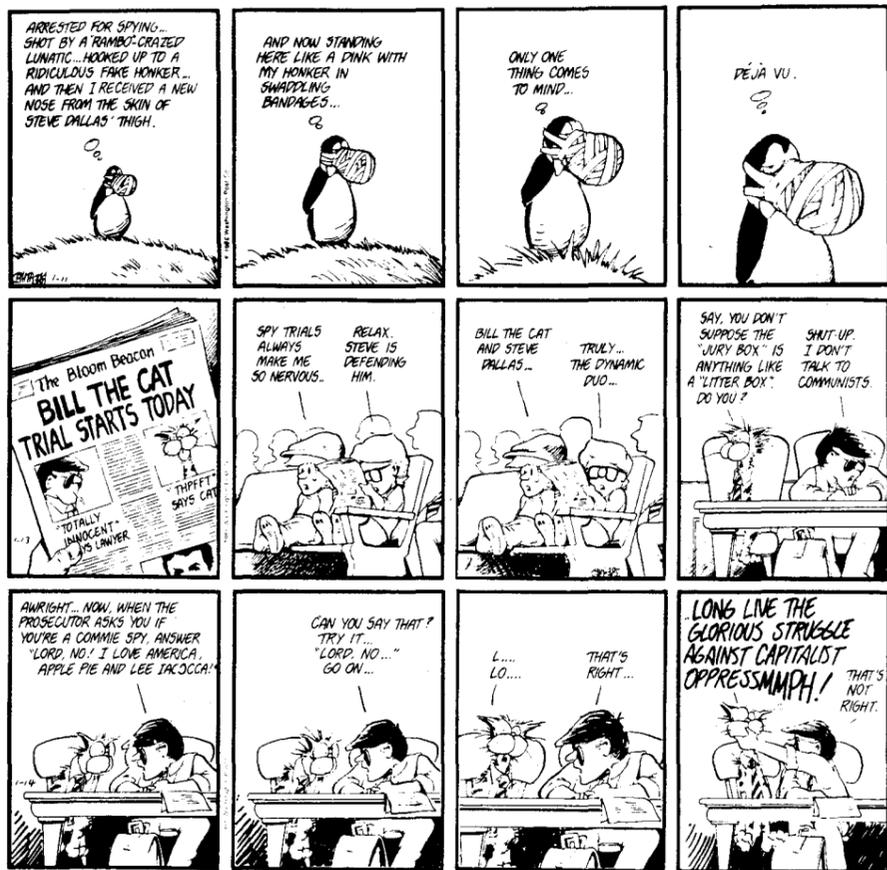
1388 E. WASHINGTON BLVD
PASADENA, CA 91104
NEAR HILL & WASHINGTON
(818) 794-4499

VISA
&
MC

BLOOM COUNTY

by Berke Breathed

Sponsored by the Caltech Y



Jewel

from page 5

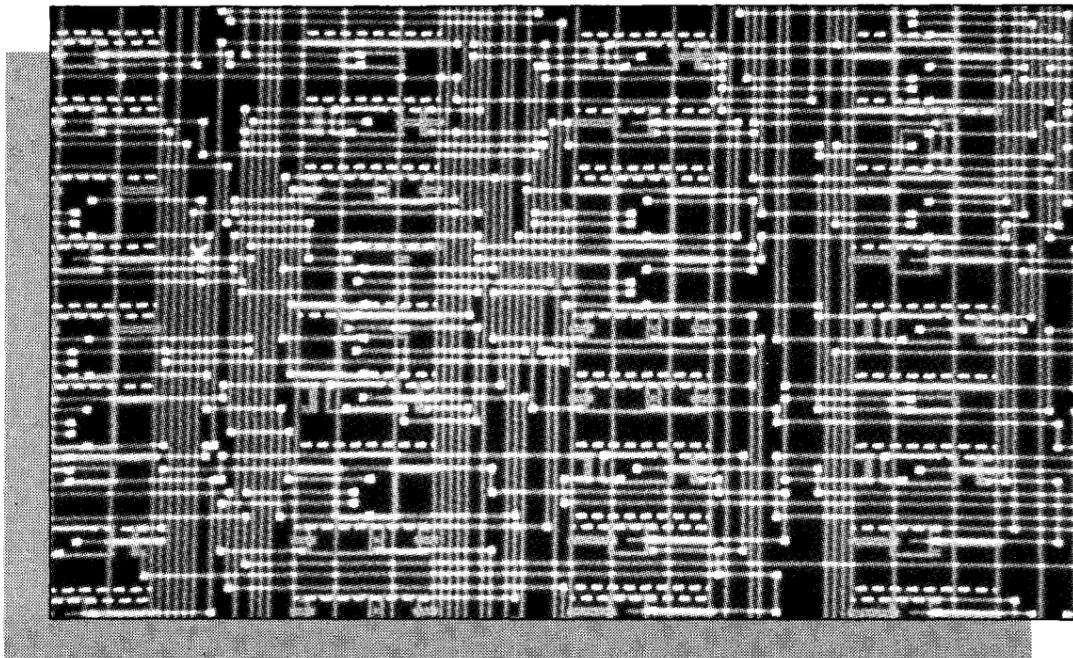
all, everyone who is *anyone* has at least *seen* her books, whether or not they have read them). Of course, true love isn't running quite smoothly enough, and besides, the writing opportunity of a lifetime is handed to Joan on a silver platter. And so the real plot begins...

Jewel, like *Stone*, is an adventure-comedy with occasional serious overtones. There is always a chance that one of the dangers will suddenly turn *real* and kill a character. Also, the basic plot, involving the possibility of a *jihad* sweeping down the Nile and upsetting the 'balance' of the whole Middle East, is quite a scary one. Unfortunately, that's the only part of the movie that fails. The villain, supposedly powerful and charismatic, comes across as a jerk on a power trip. His guards are such yoyos that they aim searchlights around the *inside* of his fortress, just in case anyone climbs off one of the interior balconies, and then don't spot them when they do. His military force is such a joke that not even the Egyptian army would have had to worry. His charisma? Well, decide for yourself, but I wouldn't follow him the length of a hall, much less into battle.

Michael Douglas and Kathleen Turner are marvelous. Danny DeVito gets a bunch of good lines, especially when he tells what happened to *him* after the end of *Romancing the Stone*.

Now about those dancers and jugglers... um, well, you see, the National Senegal Dance Company plays a group of Nubian warriors and maidens, and the Flying Karamazov Brothers are nomadic Sufi philosopher-warriors, and... well it made sense at the time, trust me. (If you didn't get to see the Karamazov's during their recent appearance at Beckman, let me assure you that they are the most amazing and bizarre juggling act in modern history, and while they don't juggle any live cats or sacks of pudding in *Jewel*, they *do* get to display their skills.) Actually, the nomads came across as sort of comic-relief Fremens (for those of you who saw or read *Dune*).

Jewel of the Nile has excitement, adventure, romance, chase scenes, juggling, and a whole lot of other good things. It's a very good film, well worth your time and money to see. You may have a little trouble picking up the plot if you haven't seen *Romancing the Stone*, but it will still be enjoyable. Go see *Jewel of the Nile*.



CLASS PROJECT.

At LSI Logic, our customers enroll for five days of intensive training to learn how to master our proprietary LDS™ software tools, to help design advanced Application-Specific Integrated Circuits (ASICs) like the one pictured above.

With ASIC, an engineer can design more functionality on a single chip using less die space and less power than with standard products. It let one aerospace contractor replace 200 separate circuits with one gate array — eliminating 3000 pounds of copper wire and making their aircraft faster and more fuel-efficient.

We pioneered the ASIC industry, and our leadership in this growing technology will help us grow to become a \$1 billion company by 1990.

We're already well on our way. We do more HCMOS gate array designs than all our competitors combined. We have twelve design centers around the world, along with affiliated companies in Europe and Japan. And we've got \$350 million in assets — all focused on ASIC. All of which explains how in five short years LSI Logic has grown to approximately \$135 million in sales for 1985.

The people we hire now will enjoy a rare opportunity in their careers. A chance to reshape the semiconductor industry, and to reap the rewards. If you've studied electrical engineering, computer science, chemical engineering, physics or a related scientific discipline, then explore our opportunities at LSI Logic.

CLASS PEOPLE.

We think your degree represents some very valuable skills and we'll give you a chance to use them immediately at LSI Logic. We'll also support your efforts to build on your education, to try new areas. And the whole time, you'll be learning from the best people in the industry.

There are many rewards associated with a career at LSI Logic. They include an exceptional salary and benefits package with educational assistance, stock options, stock purchase plan, cash profit sharing, and a variety of healthcare benefits.

We'll be on campus Monday, February 3rd.

Learn more. Talk to our company representatives when they visit your campus, or send your resume to LSI LOGIC CORPORATION, College Relations, Dept. PP, 1551 McCarthy Blvd., Milpitas, CA 95035. We are an equal opportunity employer.

LSI LOGIC CORPORATION

Let's Talk Specifics.

SPORTS

L.A. Clippers Offer Discount

\$3.00 tickets can be purchased only at the Clippers' Sports Arena box office, open Monday-Saturday from 10:00 a.m. to 6:00 p.m. For further information, contact the Los Angeles Clippers' ticket office by calling (213) 748-8000.

Jackets

Pay attention! Any varsity athlete who wants to order an award jacket should contact ASCIT athletic manager, Michael Keating (Rm. 104, Page; x3774) before 2:00 p.m. today. The price is about \$75.00. Eligible athletes receive an ASCIT subsidy of one half the cost. Read the *little t* to find the eligibility requirements.

In an effort to reach out to the young student crowd around the Los Angeles area, Clippers' General Manager Carl Scheer announced Monday that the Clippers are instituting a special student ticket price of \$3.00, applying to all \$10.00 tickets to Clippers games.

"However, it is not only with USC in mind that we provide the special \$3.00 ticket. Los Angeles has one of the more populous college environments in the country today, and coupled with the numerous high school students, *et al*, we feel this will provide them all an opportunity to see exciting NBA basketball at reduced rates."

"With the Sports Arena located in such a unique surrounding presented by the USC campus just a short distance away, it became a natural to establish a student discount on our tickets," Scheer said.

The student discount applies to the students at any level of education provided valid student identification is presented upon purchase of the tickets. The special

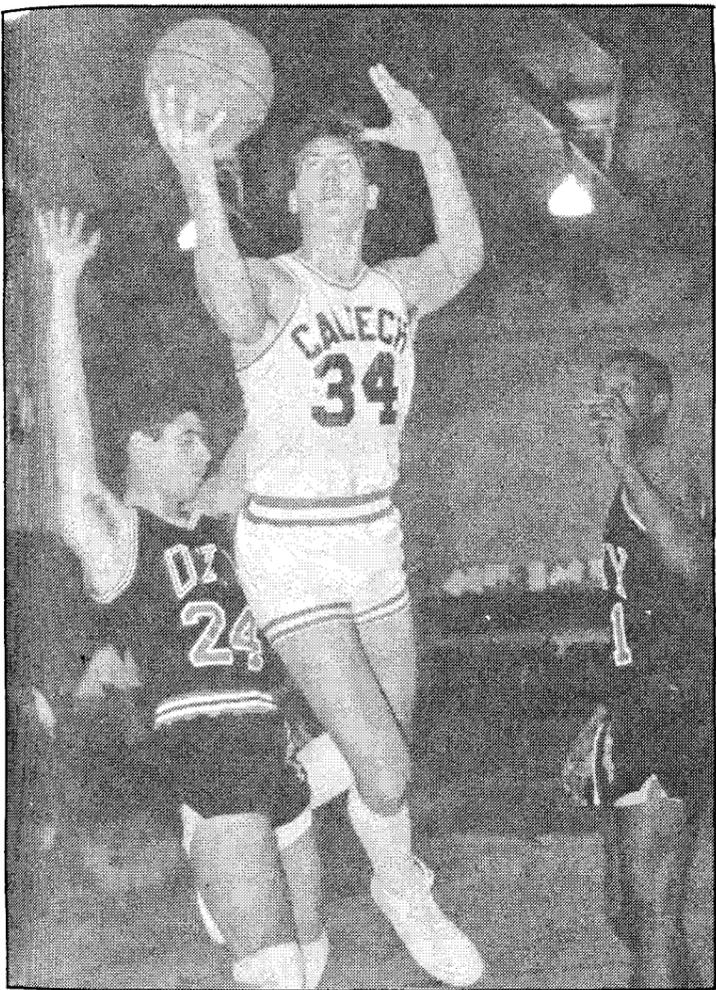


photo by Rod Van Meter

Basketball— Jim Helgren flies past Occidental J.V. defenders to lay in two points for the dribbling Beavers. The Caltech basketball team went on to down Oxy 72-53. In the past week, the Caltech team have defeated Pomona J.V. and fallen to Redlands J.V. Tomorrow night, Caltech and Claremont J.V. play at the Tech gym.

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Sat.	1-18	10:00 am	Wrestling	Pomona-Pitzer	Pomona-Pitzer
Sat.	1-18	10:00 am	Swimming (M/W)	Occidental & Whittier	Caltech
Sat.	1-18	7:30 pm	Basketball	Claremont-Mudd JV	Caltech
Sun.	1-19	Sometime	Women's Soccer	Somebody	Somewhere
Wed.	1-22	4:30 pm	Wrestling	La Verne	Caltech
Wed.	1-22	6:00 pm	Basketball	Whittier JV	Whittier
Thu.	1-23	TBA	Swimming (M/W)	Las Vegas Invitational	Las Vegas
Fri.	1-24	TBA	Swimming (M/W)	Las Vegas Invitational	Las Vegas
Sat.	1-25	TBA	Swimming (M/W)	Las Vegas Invitational	Las Vegas
Sat.	1-25	6:00 pm	Basketball	La Verne JV	La Verne
Sun.	1-26	BLANK	Women's Soccer	BLANK SPACE	BLANK

MONK'S PIZZA

TAKE-OUT &

FREE DELIVERY

26 N. Los Robles, Pasadena
(Just No. of Colorado Blvd.)



Limited Delivery Area

MENU

	12 INCH	16 INCH
Cheese	4.99	7.12
1 Item	5.89	8.45
2 Items	6.79	9.78
3 Items	7.69	11.08
4 Items	8.59	12.38
5 Items	9.49	13.68
Monk's Special	8.59	12.38

(Pepperoni, Mushrooms, Green Peppers, Onions, & Sausage)

Slices served in store only \$1.00

Pepperoni, Sausage, Mushrooms, Onions, Green Peppers, Ham, Pineapple, Beef, Olives, Jalapeños, Anchovies, Extra Cheese, Thick Crust.

All Pizzas Made to Order with Only the Freshest Ingredients;

100% Pure Dairy Mozzarella Cheese, and Our Own Private Sauce Recipe.

All Prices Include Sales Tax. No Surprises.

CALL 304-9234

HOURS
Sun.-Thurs. 11:00-1:00 AM
Fri.-Sat. 11:00-2:00 AM

\$2.00 OFF ANY MONK'S SPECIAL

(Limited Delivery Area)
(1 COUPON PER PIZZA)

\$1.00 OFF ANY MONK'S PIZZA

(Limited Delivery Area)
(1 COUPON PER PIZZA)

\$2.00 OFF ANY LG. 16" PIZZA 2 ITEMS OR MORE

(Limited Delivery Area)
(1 COUPON PER PIZZA)

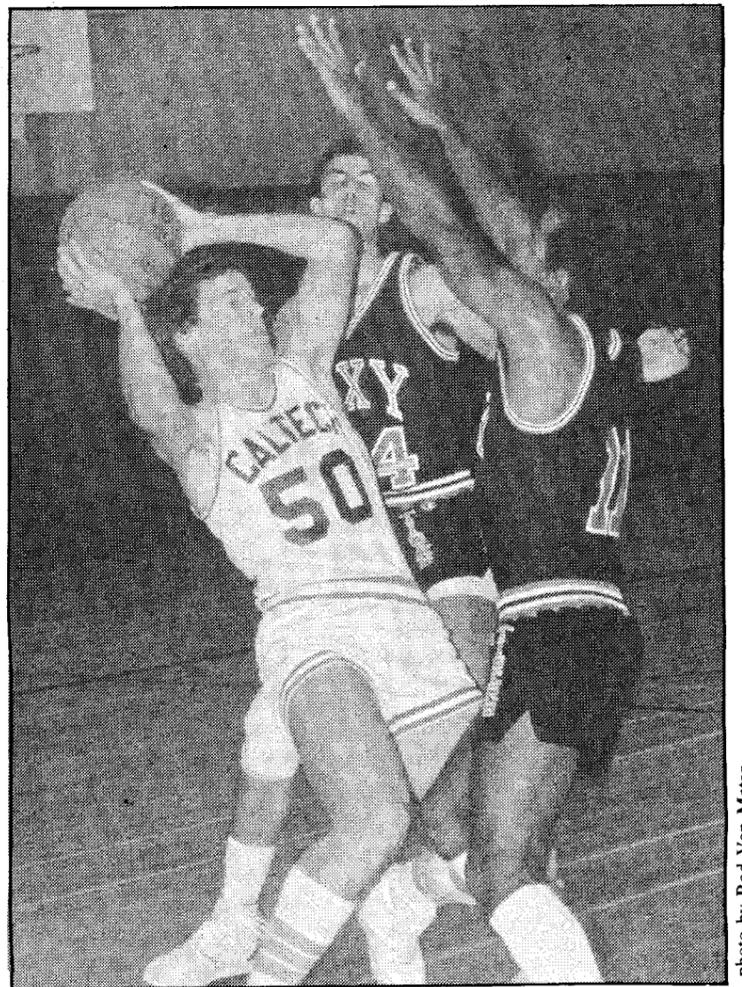


photo by Rod Van Meter

Strong Pressure— Caltech's Brian Porter has an olfactory encounter with the pits of an Occidental defender in Caltech's Wednesday night 72-53 victory.

SPORTS RESULTS

Basketball	Caltech 66 Redlands J.V. 67 Caltech 56 Caltech 72	Pacific Christian 64 Caltech 49 Pomona J.V. 49 Occidental J.V. 53
Swimming	Mills College 84 Caltech 22	Caltech 40 LaVerne 18

WHAT GOES ON

Guitar Classes

The Beginning Guitar Class (no experience necessary) has been reformulated to include not only classical repertoire but a new jazz and folk chord system as well. This will give the student a strong classical technique and enable him to branch into other forms of guitar if he desires. For further studies in classical and flamenco, Intermediate and Advanced Guitar Classes are also offered. Classes are free to Caltech students (and other members of the CIT community, space permitting). Undergraduates can receive 2 units of credit if they choose. Classes will be on Tuesdays starting January 14 in Fleming Music Room as follows:

Beginning, 4:30-5:30 p.m.

Intermediate, 3:30-4:30 p.m.

Advanced, 5:30-6:30 p.m.

Private instruction can also be arranged on any level with instructor Darryl Denning, who has an international background in recording and performance. For further information call Mr. Denning at (213) 465-0881.

Surf's Up for 86!

SURF applications are now available for 1986. Interested students may pick them up in the SURF Office, Room 3 Dabney. Completed applications must be submitted no later than 4:00 pm on Monday, March 3. A notebook containing possible SURF projects is available for students to peruse in the SURF Office. If you have any questions, please see or call Carolyn Merkel in the SURF Office, Room 3 Dabney, Ext. 3675.

Cal Grant Applicants

All freshman students who have completed a Cal Grant Supplement (or who will) **must** complete the "Additional Report Request Form." **Failure to do so will result in automatic denial of the Cal Grant.** Please stop by the Financial Aid Office as soon as possible to pick up this form. Cal Grant deadline: February 11, 1986.

Scholars Dollars

The Scholarship Bank has announced ten new scholarship programs that are currently accepting applications. Funds are now available for future college teachers, returning women students and other exceptional students. Also available are scholarships for different specialized fields. A variety of on-campus jobs are sponsored by The Scholarship Bank. For more detailed information, see the bulletin board outside the Tech office.

Bridge Club

The Bridge Club meets at 7:00 pm Mondays in the Red Door Cafe. Everyone welcome. We play duplicate and are ACBL sanctioned. Questions: call Jeffrey Pugh (x4543), Jennifer Stern (X4476) or Jeff Stern (x6627).

Earth Station Enterprise

The next Caltech-MIT Enterprise Forum will be held Tuesday, January 21, 1986. Fred Fourcher, President of MIRALITE, an organization designing and manufacturing earth stations for satellite-relayed cable television, will present his business plan to a panel of technical, financial and marketing experts. MIRALITE designs and manufactures a 5-meter dish with receive and transmit capability. They seek funding for further testing and marketing to video conference centers and broadcast stations. The Forum at 7:00 pm in Baxter Hall is free to Caltech students with ID.

Raffle Raisings

The Newman Club's raffle raised \$457.33 for victims of the Colombian volcano eruption. All prizes were donated by local businesses so the entire sum has been sent to the Red Cross. Winners in the raffle include Janet McWaid, Steven Ferris (Ricketts), David Garza (Page), Randy Pollock (Fleming), Robbie Robb, Cynthia Whitman, Mark Evans and Jeff Hartt (Ruddock), John Scott (Page), Tom Kerruish (Dabney), Doug Gray and Larry Siegel (Blacker), Julie Bolster, Renée Thorf, Chris Eich and Prof. Bellisard.

Soroptomist Fellowship

Soroptomist International of Los Angeles announces the Gertrude Schuckert Award in the amount of \$3,000 for graduate study for women in 1986-87. The field of study is open and competition is open to women who are U.S. citizens and residents of the State of California. Candidates must be enrolled in a graduate degree program in the 1986-87 academic year. For further information, contact the Financial Aid Office, Room 10, Parsons-Gates. Application deadline: Saturday, February 15, 1986.

Korean-American \$\$

Scholarships are being offered to full-time students with Korean heritage. Students may be undergraduate or graduate students. Application forms are available from The Korean American Scholarship Foundation, Western Region, 20281 Running Springs Lane, Huntington Beach, CA 92646.

Application deadline: January 31, 1986.

Free Money for Seniors

This is it, seniors—time to turn in your senior photo to the *Big T* office (first floor, Winnett). Photos are due no later than Feb. 7. They should be black and white (any size), preferably on glossy paper. Please include your name, option, and hometown. Call us at x6154 if you need a photographer.

Yearbook Class

The Yearbook Class (PA 15) will meet in Baxter 127 on Tuesdays at noon. Please come if you are interested in any aspect of the *Big T*. Feel free to bring your lunch. The class is worth 3 P/F units.

Feast With CLAGS

CLAGS is going to Moun of Tunis (Moroccan food). If you enjoy good food and great scenery, come join us Tuesday at 7:30 in front of Winnet. Please call Josh Susser at 974-5553 if you plan to go. Cost will be \$10-\$15. We will not be meeting Monday Night in the Y-lounge.

Totem Reborn

The *Totem* is being resurrected again this year. If you draw, write, or photograph, I will gladly accept drawings, poems, short stories, prose, and photographs of any kind. Talent is not a prerequisite; just express yourself! I'm trying to publish two *Totems* this year, so please contribute something by Feb. 7. You can mail contributions to Richard Lawson 1-55, or drop them off at my room, 221 Ruddock. Questions? Call me at x6182.

KISMET

The annual Caltech Musical needs basses, baritones, tenors, and, of course, hands willing to build, sew, and paint. Call Deena, x2158.

Women's Tennis

All undergraduate women interested in playing tennis are invited to come out and join the Caltech women's tennis team. Practices are weekdays from 4-6 pm at the tennis courts. Matches will be Wednesdays and Saturdays, starting Feb. 1. Come out and give it a try!

Cal Grant Deadline

February 11, 1986 is the postmark deadline for both new and renewal Cal Grant applicants. Current Cal Grant recipients should have already received a SAAC and renewal supplement from the California Student Aid Commission. New applicants (and students who applied in previous years but were ineligible) can pick up the Cal Grant Supplement at the Financial Aid Office.

Faculty Photos

Time is running short for faculty members to submit their favorite photos of themselves to the *Big T* (107-51). Photos should be black and white (any size) preferably on glossy paper. Please include your name and department. Remember: if you don't find a photo, we will!

Grad Furniture

The Housing Office is in the process of reviewing furniture options for the new Catalina Graduate Apartment Complex. Any Graduate Students interested in becoming involved in the selection of furnishings are encouraged to contact Linda Chappell in the Housing Office at 356-6178 immediately.

Write Tech

CLASSIFIED

HELP WANTED—

COMPUTER ENGINEERS. Full time contract and permanent positions at JPL and other Valley locations. BSEE or Computer Science or equivalent experience. Execuserve Personnel Service. 1756 Manhattan Beach Blvd., Manhattan Beach, CA 90266 (213) 376-8733.

FOR SALE—

APPLE IIe FOR SALE with 128K, double hi-res graphics w/80 columns, 2 drives, Hayes modem, CP/M card, Mockingboard, SAM (speech) card, mouse, Wildcard, and serial and printer cards. Includes many manuals, plus over 500 double-sided disks FULL of new software. Disks come in a wooden disk case, along with 60 blanks. Printer and TV/Monitor/RGB are optional. Contact David in Blacker #60 (356-9344) or Brett in Ruddock #133 (578-9768).

REALTY—

2 BEDROOM/1 BATH CONDO with fireplace and built-ins. Pool, spa, and recreation room. Security parking. Near Caltech. Agent (818) 357-0057 \$79,500.

GENERAL—

INSURANCE WAR! Will beat any price, or don't want your business! Sports cars, multi-tickets, good driver discount. Request "Caltech Plan." Call (818) 880-4407/4361.

NEW, EXPANDED SELECTION OF DOVER BOOKS. Classics in Physics, Mathematics, Engineering, and more. Permanently bound, high-quality paperbacks inexpensively priced at the CALTECH BOOKSTORE.

RATES: \$2.50 for first 30 words; 10¢ for each additional word. Payment must accompany ad.

HONDA

Present Student I.D. For
SPECIAL DISCOUNTS!



Join the Elite™
ELITE™



Arrive in Style
AERO™



Go on a Spree™
SPREE™

BILL ROBERTSON & SONS, INC.

HONDA OF HOLLYWOOD
6525 SANTA MONICA BLVD.
PHONE (213) 466-7191

Sam Custom Tailor
P M SAMSON
49 NORTH ALTADENA DRIVE
PASADENA CA 91107
818-793-2582

**ALTERATIONS
RETYLING
TAILORING
INVISIBLE REWEAVING**

Special rates for Caltech/JPL community.

THE HAIR CUTTERS

HIS AND HERS
OPEN EVENINGS

449-6967 449-1022

\$3.00 Discount for Caltech students with this ad

1009 E. COLORADO PASADENA

PARKING IN REAR



**Tina & Michael
HAIR DESIGN**

Specializing in Unisex
Haircuts, Perms,
and Color
20% off to
Caltech community
Walk-ins and
Appointments
991 E. Green Street
Pasadena, California
Parking on
108 S. Catalina
793-2243 or 449-4436

CALTECH

PASADENA, CA 91125

The California Tech is published weekly except during examination and vacation periods by Associated Students of the California Institute of Technology, Inc.