Prisoner Returns

Patrick McGoohan's "The isoner," a series felt by many have been ahead of its time hen first telecast over a decade o, will be reprised beginning onday, January 16 (8 to 9 n), on KCET, Channel 28.

Hosting the cerebral ction-suspense series will be Dr. oderic Gorney, associate ofessor of psychiatry at the CLA School of Medicine.

Conceived by McGoohan, who only served as the series' star d executive producer but who wrote and directed several of 17 hour-long episodes, "The risoner" is an intellectual hriller. A commentary on intemporary society, the wellian Saga especially warns ainst creeping Big Brotherism. The action is initiated by the duction of McGoohan, a man ho has just resigned in anger om a highly confidential osition with British intelligence, d his re-location to a quaint, sinister, storybook village. here, designated as Number Six, is subjected to various

methods of interrogation and a series of ploys masterminded by the mysterious Number One and a bewildering succession of Number Twos. The purpose: to pry loose vital secrets locked in his mind. Whether he will survive the ordeal and eventually escape, or be crushed in the process, is the Prisoner's continuing concern. The resultant conflicts come out as if a spy story scripted by Kafka: artistic, entertaining, occasionally exciting, but always a bit puzzling.

First produced for British television over 11 years ago, "The Prisoner" has been seen in many countries around the world, invariably sparking controversy about its meaning, characters, symbols and special effects. Since going off the air, it has retained a following through showings at high schools, college campuses, science fiction conventions and other limited areas, and has become something of a cult classic. The show will repeat Saturdays at 10 pm.

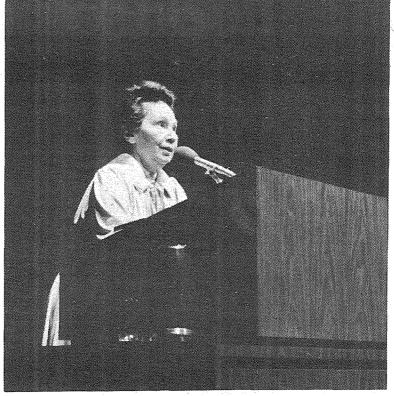


By Michael Kurilla

The acceptance of film as a legitimate art form is now vogue. Revival coming into houses and theaters that specialize in foreign, older American, and other vintage films are doing a booming business. It's not surprising to see more theaters of this type opening. The newest of these is the New Encore Cinema, on the corner of Melrose and Van Ness in Hollywood.

The theater opened on Jan. 1, but their official opening came this past Sunday with an LA first, Woody Allen's Play It Again, Sam, and Humphrey Bogart's classic, Casablanca. This is the first time these two films have ever appeared on the same bill in an LA theater. The bill will continue all through the week with the final show Saturday. I would suggest seeing Casablanca first to fully appreciate Woody Allen. Their schedule is made up through March and ther is one posted outside the Caltech Y on the bulletin board.

Some of the films to be mentioned include a Marx Sunday-Monday Brothers Festival. Ten Marx Brothers films will be shown every Sunday and Monday beginning with three films on Jan. 15 and continuing till Feb. 6. The films include their first seven films and three of their later ones. After the Marx Brothers, beginning on Feb. 12 and continuing every Sunday and Monday will be a Chaplin festival. Chaplin's feature films and many of his early silents will Continued on page seven



Dr. Thelma Moss during her talk on internal energy. Photo by Don Bacon

Acupuncture, Aura and Energy Bodies

By Richard Willson

"It seems strange to be at Caltech," said Dr. Thelma Moss, "because we all know you don't believe most of this." Dr. Moss, a medical psychologist at UCLA's Neuropsychiatric Institute, lectured Wednesday night on the subject of Acupuncture and Kirlian photography.

Dr. Moss began with a discussion of the original western dismissal of acupuncture as an unusually deep state of hypnosis made possible by fanatic devotion to the personality and teachings of Chairman Mao. Acupuncture was later demonstrated to work on animals, who "are not known to carry copies of the Red Book." The true mechanisms of acupuncture are as yet not well understood, but are ascribed by inderstood, but are ascribed by some to the existence of an "Astral" or "Energy" body. The Energy Body would consist of the "field around the physical" and also might, when disturbed, be the original locus of disastration.

manifestation of the Energy Body is an internal energy flow which is most intense at the electrodermal, or acupuncture points. These points have been detected through the use of a sensitive galvanometer by Soviet investigators whose work was inspired by a Chinese defector, a doctor who had completed three years of acupuncture courses in addition to his western-style medical training. Soviet workers have also investigated the possible treatment of epileptic seizures and arthritis through application of a laser beam to appropriate acupuncture points. UCLA investigators have also demonstrated the therapeutic effects of application of megacycle frequencies to these same points.

Dr. Moss then presented a film entitled "Explorations in Kirlian Photography," of which she is the principle originator. Kirlian photographs, made by passing microamp currents at 3 to 20 KV potentials through the subject and then through film

plates, exposing them, may also serve to demonstrate acupuncture effects. An injured finger shows an unusually large corona, ascribed to "imbalanced energy flow" by some. Balance (and corona magnitude) are restured to normal with the placement of acupuncture needles, and the effect persists after the needles are removed. Corona emissions in normal fingers may also be stimulated or depressed by placement of needles in points traditionally known as sedation or tonification points.

Dr. Moss also presented evidences of Kirlian-detectable effects of the state of consciousness. Magnetic passes made by John Hubacher, a hypnotist and mesmerist, were shown to depress the corona discharge of a human subject and also to preserve both freshness and corona of a chrysanthemum. The auras of the hands of faith-healers reliably (2000 examples) show a red-yellow flare during the healing process, and the auras of Indian yogis show a similar excitation when they are asked to "energize" themselves. Kirlian photographs of the juxtaposed fingers of arguing people sometimes show a corona "barrier" between the two, the auras seeming to flee each other, and the aura of one or the other often disappears entirely. In contrast, people feeling affectionate toward each other may show coronas with intertwined arcs.

Family portraits often show some intriguing effects. The coronas of the parents are usually strongly joined, with the children often isolated and somewhat dimmer. One son's aura showed strong tendrils reaching toward the corona representing his mother. The son was aged 6. "Prime time for Oedipus." commented Dr. Moss. In one family group, a 17 year old son repeatedly failed to make any impression on the plate. He became greatly frustrated at this, so Dr. Moss suggested that he make a separate series of plates

Object - Kowal Now Chiron

"Chiron" is the name suggested by its discoverer for "Object-Kowal," the category-defying heavenly body discovered circling the sun by Hale Observatories astronomer Charles Kowal. In mythology, Chiron was one of the leading members of the group of centaurs, which were half-man, half horse creatures. According to Mr. Kowal, should more such objects be discovered, they could be named after other centaurs. Chiron was known in Greek mythology as the son of Kronos; Kronos in Roman mythology was known as Saturn. Thus, said Mr. Kowal, the name Chiron is appropriate because the orbit of Chiron lies between Saturn and Uranus. The name will now be submitted to the International Astronomical Union for official sanction.

It is still far from settled, however, whether Chiron should be considered a planet, a new class of asteroid, or a dead comet.

Brian Marsden of the Smithsonian Astrophysical Observatory has also computed a refined orbit for Chiron, drawing on Kowal's latest detection of the object on photographic plates Kowal made of the sky at Palomar Observatory in 1969, eight years before he discovered the object on November 1, 1977. After the November discovery, astro nomers determined that the object was about 100 to 400 miles across, about the diameter of the largest asteroids. It could not be classed as an asteroid because, by definition, they are objects circling the sun between the orbits of Mars and Jupiter. The object was like a planet in terms of its orbit, but was far smaller than the known planets. Thus, astronomers would have to clarify their definition of a planet in determining the status of the new object.

The new orbital calculations indicate that Chiron's orbit crosses that of Saturn and almost Continued on page seven

with Moss's pretty lab assistant. Remarkably enough, his aura was soon seen shining brilliantly.

Moss has also investigated the Kirlian effects of plants. She has demonstrated the feasibility of discrimination between live and dead seeds by corona observation, and has observed a brilliant corona flare in the areas of high metabolic activity in germinating seeds. One of the most interesting effects she claims is the so-called "phantom leaf phenomenon", in which the Kirlian image of a leaf shows the presence even of pieces of the leaf which have been removed. It took her group "thousands" of exposures to achieve results, but the film she did present was very suggestive. Like the flaring of the auras of germinating plants in regions of growth, the phantom leaf phenomenon seems to be correlated with high metabolic activity as it is most easily seen in the spring.

Pings Selected to Head AGS

Cornelius J. Pings, vice ovost, dean of graduate studies, nd professor of chemical igineering and chemical physics Caltech, has been elected esident of the Association of raduate Schools (AGS) and will ve through October 1978.

Members include the graduate ans of 48 American and 2 anadian universities with outstanding graduate education and research programs."

Pings is internationally known his research in applied emical thermodynamics, latistical mechanics, and liquid ate physics and is involved in imerous professional, civic and overnmental activities. He has ceived many awards for his ork, including the 1973 Alpha thi Sigma Award in chemical search, the 1972 American stitute of Chemical Engineering AIChE) Technical Achievement ward for research on the havior of liquids, and the 1976 AIChE Civic Achievement ward. He joined the Caltech aculty in 1959 after four years s a member of the faculty at Stanford.

According to Dr. Pings, a major issue confronting the AGS will be a decline in the numbers students applying to colleges and universities, which is expected to begin in 1979. This decline will probably lead to increased competition for the best students, said Dr. Pings, an a tendency to accept less qualified students into graduate esearch programs. Caltech and other major research institutions an work through the AGC, said Dr. Pings, to maintain academic tandards as enrollments decrease.

Theater Opens

Olive Walk Cont.

With regard to the scrap-metal and concrete barricade of the Olive Walk, there is good news and bad news. First, as they say, the good news: the Pasadena Fire Department has informed the Safety Office that there is no way that their fire-engines can fit between the "planters", and so the Olive Walk Scrap-Yard Inc. will have to be removed.

The fact that it has not already departed seems to indicate that the Administration cares more about keeping the Walk pristine than having an open fire lane to the student houses.

Now, however, the bad news: this setback has not prompted the Administration to get out of the Railroad business. In fact, it has only caused them to think in larger terms. The new plan calls for "traffic control posts" to be stuck in the David R. Smith Memorial Ramp, near Spalding, not only keeping people off the Immortal Walk, but also keeping them off the Quad as well.

Since the Administration has not deigned to explain what is going on and why, I assume that they feel that we, the students, need not be bothered about, but I suppose that if we act like good little kiddies, they might condescend to let us on the Quad twice a year to move into and out of this place.

-ed. Bielecki

ASCIT Posts Open

This Wednesday, January 11th, nominations opened for thirteen elective offices of ASCIT. These include nine positions on the ASCIT Board of Directors (BOD) and four other elective offices.

Positions on the BOD are President, Vice-President (who is simultaneously the chairman of the Board of Control), Interhouse Committee Chairman, Secretary, Treasurer, Director for Academic Affairs, Director for Social Activities, and two Directors at Large (at least one of whom must be a freshman when elected).

Also open are Activities Chairman, Athletic Manager, BOC Secretary, and California Tech Editor.

The nomination signup sheet will be posted on Flora's door in Winnett. Nominations will close at 5:00 pm Tuesday, January 17th. Campaign statements are due in to *the Tech* by 8 pm Wednesday the 18th. Elections will be held Monday, January 23, and runoffs later in the week.

Briefly, the duties of the officers are as follows.

President: Technically the president needs only to chair the BOD and to oversee the activities of the BOD and the Excomm. Practically, though, anything in the field of student affairs lies in his perview. In short, like many of these positions, the job is what you make it. Current officeholder—Bert Wells.

Vice-President: The primary responsibility of ASCIT Veep is to insure the continuance of the Honor System as a vital force among the students. He is chairman of the Board of Control but also sits on the BOD. Current officeholder—Chris Sexton.

Secretary: The secretary does the BOD's paperwork and has tremendous power. After all, he's the one who records what business actually transpired. Current officeholder—Tom McDonnell.

Treasurer: This post requires someone who can keep books, handle money carefully, and

prepare at least rudimentary financial statements. Usually, the only voice on the BOD appealing for fiscal sanity, his role is crucial to maintaining ASCIT's solvency. Current officeholder—Mike Schwartz

IHC Chairman: Remarkably enough, the IHC chairman chairs the Interhouse Committee. If you laugh in the faces of snarling lions, you may enjoy the IHC. But when it comes down to the nitty-gritty concerning the student houses, this is where it's at. Current officeholder—Eric Kaler.

Director for Academic Affairs
The DirAc not only runs the
Educational Policies Committee,
but he is responsible for the
publication of the TQFR.
Moreover he is the only member
of the BOD with a salary.
Current officeholder—LeRoy
Fisher

Director for Social Activities This person is chairman of the ASCIT Executive Social Committee, which administers the ASCIT social budget. Current officeholder—Paul Gutierrez.

Directors at Large: These two members of the BOD (one of whom must be a freshman when elected), besides being privy to all ASCIT business, conduct the Red Cross Blood Drive for students, maintain the ASCITBUS, control the ride board and perform other duties as specified by the BOD. Current officeholders—Leslie Paxton and Ray Beausoleil.

The remaining officers are not members of the BOD:

Activities Chairman: The activities Chairman manages the ASCIT movie program. Current officeholder—Steve Smith.

Athletic Manager: The Ath Man sits on the IHC, coordinates the athletic award program and is chairman of the Athletic Committee. And finally:

California Tech Editor: You guessed it—he edits (or more typically, they edit) this mangey sheet. Nuff said. Current officeholder—ed. Bielecki.

Comment on Tech, Science and Living

To the Editor:

I enjoyed reading a letter on 'Tech, science and living' in January 6 issue of *The California Tech*. I wish to take this opportunity to convey my congratulations to Ms. Powelson for her deep interest in the development of her own personality, for her lucid style of writing and for her admirable courage to share her thoughts with her fellow friends.

In my humble opinion, such intricate phenomena can better be understood by the interested individuals and under the basic framework of developmental psychology, personality and other related fields.

My best wishes to Ms. Powelson for her inquiry in the subject matter.

Sincerely,

Kiran R. Magiawala

Comment on Rumor Mill

To the Editor:

If "A Frosh" would judge people by their actions rather than by their words, he would find Techers in general much more discerning and less influentiable than his letter implies. And if he himself is as influenced and as motivated by gossip as he states, I would say he is more cowardly than he thinks.

Judy Powelson

Winnett Stereo

-Installation is Months Late

To the Editor

On or about October second of last year (1977), a stereo tuner and amplifier arrived at Winnett Student Center. These were promptly turned over to Audio-Visual with instructions that a security cabinet was to be constructed for them and for the turntable already in Winnett.

Audio-Visual, of course, gave the specifications for the cabinet to the carpentry shop and asked that construction be started as soon as possible. By roughly the middle of October, the necessary paperwork had been completed, and it was expected that the carpentry shop would shortly have the cabinet ready for installation. There followed a long period of silence from the carpentry shop, and now, about three months later, the cabinet still has not been installed, although the shop promises installation as of next Monday. Once again the double standard applied at the Caltech commonity becomes apparent. The responsible personnel in the shop, presumably competent professionals (after all, would the Institute hire anyone who is not reasonably competent?), obviously are not accountable to anyone for such unreasonable delays. If they were, they would have made several reports (at least one per month) on the progress of the project. The most comparable analog to this situation for students is a project lab, where weekly reports are expected to be made regarding the progress of the project. A student so remiss as to let an

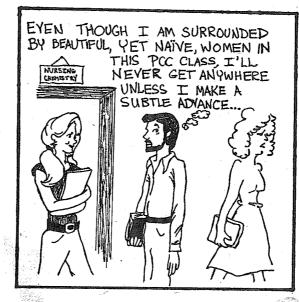
entire term go by withour eporting on the progress of project and failing to have the project completed by the end of the term would surely flunking the course. The carpentry shop, however, will presumably be paid the same amount as if the project had been completed within a month (which was, in fact, their initial unofficial and conservative estimate), and nobody will think anything of it; after all, it Physical Plant, they can't be expected to do any better that that. My question (and l'a appreciate an answer from anyone familiar with the problem) is "Why not?" If the students paying the Institute for the privilege of attending are to act responsibly, why should no a department paid by Caltech be required to act equally responsibly?

Or, for that matter, why should Flora, who as the Winnett Student Center secretary is responsible for making sure that work relevent to the Center is progressing properly, not be expected to at least be aware of the status of such a project, or why should she not be held accountable for the fact that the television set upstairs in Winnett has not been working properly for about eight or nine months now? If Caltech is indeed a community as the Administration is fond of claiming, should not all citizens of that community be required to show the same responsibility in their actions?

Sincerely,

Carl J Lydick

by PM



EXCUSE ME, BUT I WAS HAVING SOME DIFFICULTY WITH TODAY'S ASSIGNMENT AND I THOUGHT WE MIGHT STUDY IT TOGETHER AT YOUR PLACE...



DON'T GIVE ME THAT LINE,
YOU NERD!! IT'S OBVIOUS
FROM YOUR ABOVE-THE-ANKLE
"DADS & LADS" SLACKS THAT
YOU ARE A CALTECH
PERVERT!!!

ACTUALLY, THE RED SOCKS
MAKE THESE PANTS LOOK
A LOT SHORTER THAN
THEY REALLY ARE...



BALLROOM DANCING

Once again, the Master's Office is sponsoring Ballroom dancing. The first class is tonight at 7:30 in Winnett Lounge. You can even sign up for PE credit.

Dollars From Industry

The Consulting Engineers Association of California (ČEAC) announces its second annual competition for upper division scholarships in Engineering, to be awarded to a limited number of students who are interested in Consulting Engineering as a

Candidates must be preparing to enter their junior or senior years in the fall of 1978, in curricula leading to Bachelor of science degrees in Engineering.

State awards by CEAC will consist of a top prize of a \$1,000 scholarship and several additional awards of lesser amounts. Up to five of the winning state entries will be entered in a national competition spomsored by the American Consulting Engineers Council (of which CEAC is an affiliate). National awards will consist of one \$4000 scholarship and a number of lesser amounts.

Second and third engineering students with strong academic, extracurricular, and personal qualifications who are interested in the possibility of eventually entering the consulting engineering profession may obtain complete details from Ursula Hyman-Kelly, Director of Financial Aid, Room 208 Dabney Hall, or from CEAC offices at 1308 Bayshore Highway, Burlingame, California 94010. Phone (415) 344-5782.

Scholarship applications, with the specified documentary material, must be received by CEAC no later than February 15, 1978. State and national winners will be notified in, respectively, March and April.

Remember

The News

Classical and Flamenco Guitar Classes with guitarist Darryl Denning will meet each Tuesday in the Fleming Music Room starting last Tuesday. Classes are open to Caltech students and are free of charge. Other members of the Caltech community will be admitted with the approval of the instructor. The Beginning class will be at 4:30 pm, and the Intermediate-Advanced class at 5:30. Private lessons can also be arranged with Mr. Denning. For information call 650-1692.

Big T Heads Needed

Nominations are now open for the top two management positions in the Caltech vearbook, the Big T.

Editor-in-Chief and business manager are the two available jobs. The editor's salary is \$300 (or \$400 in certain circumstances). The business circumstances). manager's salary depends on the amount of advertising sold; a typical salary in the past few years has been \$300.

The success of the Big T (both aesthetic and financial) depends heavily on those two appointments. To confirm this, just leaf through old year books or look at the Big T's financial history: some years bust and some years boom.

The ASCIT Board of Directors will be making these appointments shortly. A nomination sheet will be posted on Flora's door in Winnett. For further information contact either Ed Bielecki or Bert Wells.

No Service

Charge

Our experience with the addition of a fifteen percent (15%) Service Charge on special functions at the Athenaeum has been adverse. While our costs are up due to inflation, the addition of the Service Charge has not solved these problems and has led to some hard feelings. The House Committee has agreed that this charge in its present form should be dropped. A more uniform policy on this matter will be prepared later.

Sign Up To Sign Up

On campus interviews for possible employment will begin on Monday, January 16, 1978. The following companies are scheduled to recruit during the first week:

January 16-The Perkins Elmer Corp., The Robert Bosch

January 17-Monsanto, Mostek, U.S. Navy Officer Recruiting.

January 18-Motorola Inc., National Semiconductor Corp.

January 19-Ford Aerospace (Western Development Lab. Div.), Los Alamos.

January 20-Los Alamos, Merck, Dow Chemical.

Sign-ups may be made in the Placement Office, Room 8, Dabney Hall.

Politically Interned
Drs. Ray Owen and David Wales are pleased to announce that the Beckman Internship will be available for the summer of 1978. This internship, supported by friends of Dr. Beckman, pays a stipend of \$100 per week for a period of up to 12 weeks plus travel expenses. It allows a selected Intern to spend the summer working in the office of a politician and seeing the process of government from the inside. The Intern is expected to make arrangements with the appropriate political persons. It is open to any Caltech undergraduate who intends to be a Caltech undergraduate next

Applications for the 1978 internship must be in the Office of the Deans, room 210 Dabney Hall not later than February 3. The application should include a brief statement of the way the applicant proposes to spend the summer. Talk to one of the Deans beforehand to discuss the feasibility and advantages of the proposal.

That Fits

Limeys and Jerries

There will be a naval miniatures game in Dabney Hall Lounge this Saturday night at 7:30 pm. It will be a theoretical German vs. British scenario, based on what the Germans would have done under their pre-war plans. Beginners welcome at this, and at the fantasy gaming in Clubroom 1 of Winnett Center on Friday and Sunday nights at 7:30 pm.

Evelyn Woods

Reading Dynamics

Once again, free introductory lessons will be given in Clubroom One of Winnett Center twice nightly at 7 pm and 9:30 pm on Jan. 10, 12, 16, 17 and 18. Classes will begin on Thursday, Jan. 19 at 7 pm. Students, faculty and staff are welcome, and eligible for a \$100 discount, and possible free scholarship.

Art Workshops Reworked?

There will be a meeting today, Friday, January 13 of all people interested in discussing the reinstatement of the art workshops. Come to the Master of Student Houses' offices at 4

Math Money

There are two math prizes offered this year. The E.T. Bell Undergraduate Research Prize for juniors and seniors, and the Morgan Ward Competition for frosh and sophomores. Talk to a math Faculity member for details.

Rampant Memorabilia

On Sunday, January 15, there will be a nearby meeting of a mini-convention and new organization dedicated to: Nostalgia. Yes, return with us now to those thrilling days of yesteryear when cokes and comic books cost less than phone calls. This event, sponsored by the same people who brought you the Fantasy Faire last summer, will be at the Pasadena Hilton, at 1 pm, and the nominal cost of \$1 will bring you an afternoon of programs about the past.

It will finally be held this Saturday at 1 pm, on Del Mar between Wilson and Michigan avenues. Be sure to wear expendable shoes and clothes.

TOMORROW

Caltech and Oxy Make Beautiful Music

Under the direction of Kim H. Kowalke, the Occidental-Caltech Orchestra will give concerts at Thorne Hall, Occidental on Monday, January 30 at 8:15 pm, and Ramo Auditorium, Caltech on Wednesday, February 1, at 8:15 pm.

The program will feature Borodin's "Polovetsian Dances", Bach's "Brandenburg Concerto No. 1", and Hanson's "Symphony No. 2 (Romantic)".

Admission is free and the public is invited.

Prepare to Sell Yourself

JUNE GRADUATES: Now is the time to begin thinking of preparing a resume for future use in the job hunting market. The Placement Office offers its services in assisting you prepare your resume with examples to follow and individual consulting. Come by Room 8 Dabney Hall if you would like help.

Stud Shop: Services Âvailable

There will be a Student Shop meeting at 2:00 pm Jan. 14. Shop members who missed last week's meeting are requested to attend in order to get their winter term keys. At this time, there will also be an indoctrination for undergraduates and graduate students who wish to join the student shop. The shop is located in the basement of Winnett Center. For further information, consult a committeeman in your house.

Mudeo

Caltech's Caltech's Continental... is gonna make you an offer you can't refuse

Discount cards

now only \$7.50

Division of the Week: Physics, Math, and Astronomy

Free root beer float on weekends for faculty and students of Division of the Week with purchase of meal. Different division each week

SPECIALTIES

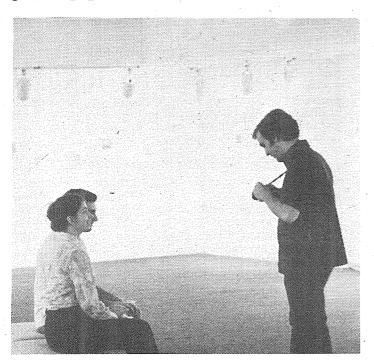
SHAORMA, SOUVLAKI-STEAK DELICACIES BAKLAVA, BOURMA-ARMENIAN PASTRY DESSERTS FALAFEL-VEGETABLE BURGER WITH DELICIOUS SAUCE WRAPPED IN BIBLE BREAD SPECIAL SERVED EVERY NIGHT: USUALLY STEAK OR PRIME RIB, RICE PILAF, SALAD, VEGETABLE, AND REFILLS ON SOFT DRINKS AND MILK

BURGER CONTINENTAL

792-6634

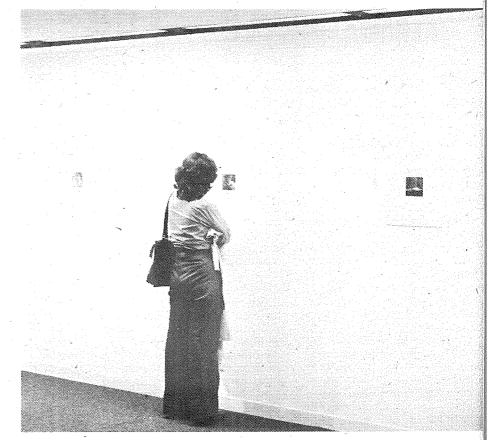
LOCATED ON LAKE 1/2 BLOCK NORTH OF CALIFORNIA

Baxter



Photos by:

Don Bacon
Yin Shih

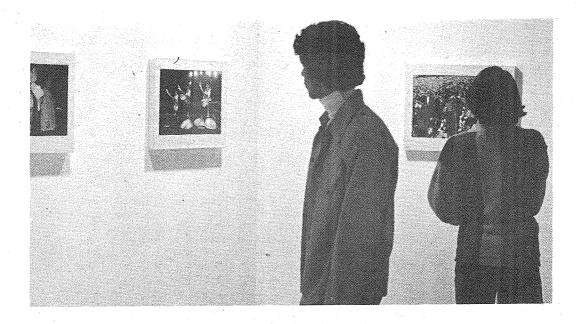


By Joel Rubinstein

Photography is sometimes considered an informational tool—a picture's purpose is toshow what something looks like. Some photographers deliberately distort reality through various techniques such as double exposure. But the photographs now on display at Baxter Art Gallery are attempts to faithfully reproduce reality. Michael Smith, director of the gallery, selected prints by Geoff Winningham and Jacqueline Thurston for the current exhibit.

Winningham's prints belong to several series. There are prints in a wrestling series, which show the sport in an unusual way. The subject of some is the wrestler as a person and of others is of the fan. Other prints are about football games with emphasis on the cheerleaders and fans. The spectator as a participant is the main idea of the collection.

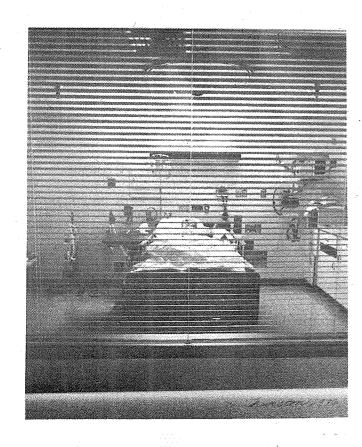
Photo

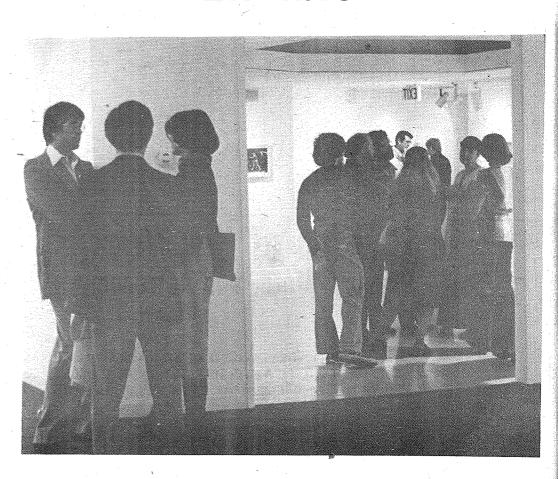


Jacqueline Thurston's prints are all hospital scenes. Her point of view is much more detached than Winninghams. She is interested in detail and composition. Winningham's pictures are nearly all "action shots" but Thurston's are static. I might describe them as human still lifes. The scene are of patients, doctors and nurses, but not the way you are likely to see them yourself. To some, the hospital is a sterile environment with people hooked up to machines. Some of her prints reflect this. But others show the joy of a new mother or the insouciance of a youngster having his eyes checked.

The Exhibit runs until February 12. Baxter Art Gallery is located in the basement of Baxter Hall of the Humanities at the north end of the building. It is open noon to 5 and is closed Mondays.

Exhibit





Photos by:

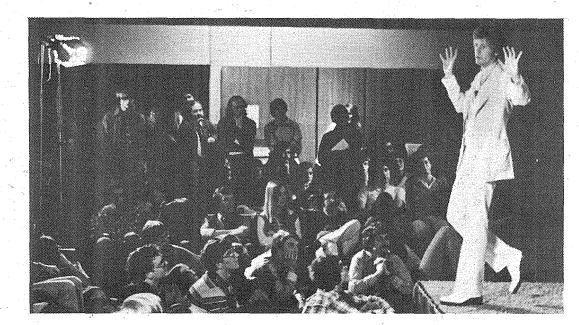
Joe DiGiorgio





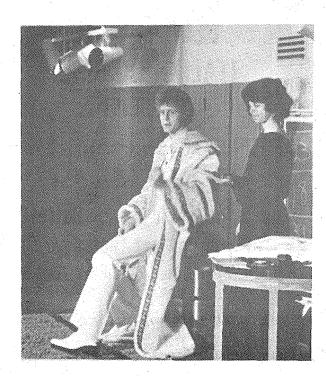
MAGIC







Harry Anderson



Edge" fund raising drive is far

Student Body Size and HSS Division Should Grow

One of these days the Faculty Committee on the Size of the Institute, formed last year, will finish its work and release its report. And, unfortunately, its recommendations are predictable: they will recommend little or no change in the size of the student

Five years ago a similar committee recommended that the size of the entering freshman class be fixed at 220, and ten years ago the ad hoc committee on Aims and Goals also recommended little change in the size of the student body. Of course, there was a minority on each committee that felt that Caltech should grow substantially; some went as far as suggesting an undergraduate size

There were several reasons the minority felt as they did. Money was one. However, the most common reason was that these members felt that Caltech should expand by enlarging its social and behavioral sciences program and its Humanities and Social Sciences Division. After relatively easy to solve problems are taken care of (such as too little classroom space) the main objection to that is that we have no assurance that these program, which would drain money from Caltech's more traditional programs, could be gotten up to the standards presently maintained by Caltech in science and engineering.

This is certainly true. To expand the HSS Division and the behavioral sciences would be risky. The Caltech community, faculty and students, is terribly resistant to change, and change which incurs some risk becomes out of the question. This is too bad, for it limits the Caltech student severely. Despite all the literature mailed to prospective freshmen, Caltech does not have an adequate HSS division. There are usually no more than four or five upper level history classes each term, almost no undergraduate political science classes, and very little undergraduate social science. The

social science we do have is almost all economics or economically oriented.

As for the quality of an expanded HSS Division, that shouldn't be as much of a problem as we are led to believe. PS/SS professors are reputedly excellent, as evidenced the offer from Carnegie-Mellon last year to essentially buy our Social Science Department. The future of the HSS Division at Caltech will also be greatly influenced by the choice of a new division chairman. It would be too bad if we were not able to attract a top notch person to chair HSS. (However, considering the trouble we seem to be having finding a president, it might well be impossible.)

No institution can stay at the forefront of its field if it stagnates. That is what Caltech is doing. The "At The Leading

behind schedule and Caltech research no longer seems to be as respected as it once was. It would benefit the science students here to have a better Humanities Division and an upgraded, and separate, Social Sciences Division. MIT has done this (or at least started in most areas) and its math/science research certainly has not suffered. And such a change would probably help the Caltech faculty too. Healthy competition from a top notch HSS program could be just what the doctor ordered.

-by Kenneth D. Duncan



R.D.Gray Honored

More than 300 friends and colleagues of Caltech's Robert D. Gray gathered at the Huntington Sheraton Hotel in Pasadena last month to pay tribute to Gray's 37-year career as Director of the Institute's Industrial Relations Center. The banquet guests included business, industry, and education leaders from throughout southern California.

Gray, 68, also professor of economics and industrual relations at Caltech, retired as head of the Center this past fall, but will continue teaching. Victor V. Veysey, former U.S. Congressman and Assistant Secretary of the Army (civil works) was appointed to succeed him at the Center.

Gray came to Caltech in 1940 from the University of Connecticut and the University of Pennsylvania's Wharton School of Finance and Commerce. He was appointed by Caltech's Dr. Robert A. Millikan to expand an

ongoing program that involve Caltech students with busine and industry leaders in learni to solve management supervisory problems.

Under Gray's leadership Center developed a bro program of seminar conferences, workshops, counseling services management problems for pub and private organization established a management libra of 8600 volumes and 45,0 pamphlets; produced more th papers management-related subjects; a worked out a system employee polls used by businesses throughout the are

"He has removed coefficient of mystification from management and emphasize human relations as the key progress," said Caltech's Vi President for Institute Relation Dr. William H. Corcoran, in I tribute to Gray.

IMMEDIATE OPENING for a sharp, energetic individual with proven interpersonal skills to represent a leader in the travel industry. No direct sales; 20 hours per week; starting January 1. We are looking for a winner with a proven record of integrity, personal stability, and community involvement. Your selfinitiative will be recognized and rewarded with an excellent incentive program. Hard work along with intelligence and innate sales know-how are the ingredients for the well-paid part-time

position. Call toll free,

1-800-821-2270, ext. 510, 24

the chance to pawn off your old bike on unsuspecting frosh. Prefer 10-speed. Contact:Mark Rosker, 16-A Ricketts.

WANTED: Used bicycle. Now is

KENWOOD KT 5300 Tuner \$95. James Long 793-6735 or X1857.

IS THERE LIFE within the atom? Are you an illusion? "Voluminous Indications of Time and the Structure of the Universe" is a 5-page scientific report for the layperson that goes beyond conventional theories of the universe. Send stamp and \$1.00 to: James E. Hansen, 1460 N.W. VanBuren, Corvalis,

experienced executive secretar IBM Selectric correcting. Clean well-displayed work. Specialization in theses, reports, resumes, Ms etc. Fast, reasonable. Pho 441-1410.

PROFESSIONAL TYPING

ADDRESSERS WANTED IN MEDIATELY! Work at homeexperience necessary-excelle pav. Write American Servi 8350 Park Lane, Suite 2 Dallas, TX 75231.

CONTACT LENS WEARER Save on brand name hard a soft lens supplies. Send for fr illustrated catalog. Contact Le Supplies, Box 7453, Phoenix, A

TEACHERS at all levels wanted. Foreign and Domestic teachers. 1063, Vancouver, Wash

Nuclear Engineers

Wanted

The Navy needs some special college graduates aren't afraid to find out how good they really are, who can complete our extensive and demanding training program and who can meet the most exciting challenge of their lives. A that leads to an challenge exciting future as a Naval Officer aboard a nuclear-powered submarine. If you think you've got what it takes to be Someone Special, contact:

Lt. Jay Munninghoff 4727 Wilshire Blvd. Los Angeles, CA 90010 Call Collect: 213-468-3321.

Occidental College and California Institute of Technology present

THE COLLEGIATE SYMPHONY RCHESTRA

Kim H. Kowalke, conductor

Monday, Jan. 30, 8:15pm Thorne Hall, Occidental Wednesday, Feb. 1, 8:15pm Ramo

> public invited admission free Program

Borodin: Polovetsian Dances Bach: Brandenburg Concerto No. 1 Hanson: Symphony No. 2 "Romantic"

ROMA GARDENS

ITALIAN CUISINE

PIZZA

SPAGHETT

RAYIOLI

OPEN 5-11 p.m. Sun-Thurs 5-12 p.m. Fri-Sat

Now open for lunch 11-2. Buffet lunch \$2.95. All you can eat Thursdays for \$4.25

> 10% off on italian food to all CIT students (buffet lunch excepted) 7 days/week

Use new back entrance for picking up orders

1076 E. Colorado

449-1948

On Judaism at Caltech

Judaism heightens awareness existence! I suppose this unds vague and general, yet, at essence, Judaism may be derstood to be a religion that sponds to the ultimate lestions and complexities of ing human. In terms of mmunity, the cultural reality the State of Israel and aspora Jewry co-join in group pression to those concerns, th religious and political, as ey affect Jewish people.

The Hillel at the California stitute of Technology has roughout its history attached elf to the concerns of the wish Community at large. At mes programs have been ordinated by its leadership oth internally and externally, ld at times by individuals who ish to pursue unique orgrammatic and group speriences. Recently, the ternationally renowned Israeli et, Yehudah Amichai, read his asitive poetry on campus. He ared a very special perspective the reality of life in Israel; an istence where war's brutal anity and pain comingles with intense joy and wonderment all aspects of human life. liday observances, especially Shabat, Chanukah, and

Passover are always celebrated here with the Caltech Hillel graciously assuming the role of host to Occidental College, PCC, and Cal State LA.

I have been associated with the Caltech Hillel for two and one-half years. As a Rabbi and Eastern Area Director of the Los Angeles Hillel Council's Extension program, I marvel at the ongoing potential for meaningful Jewish programming at the Institute, as well as significant response from the total campus community.

The month of January promises many interesting activities. First, on January 14, Caltech Professor Valentina Zaydman will be the guest answering questions on Soviet Jewry at a wine and cheese Havdalah celebration at the home of Hillel coordinator Dorene Lehavi. For information call 799-4450. And closing the month's activities, Shmuel Livneh, pantomime artist from Israel, will perform at noon on Jan. 26 on the Olive Walk Quad. All are welcome and encouraged to experience what I believe to be meaningful programs of Jewish interest. Shalom.

Rabbi Michael Perelmuter

WE STOCK:

Continued from page one

Chiron

touches that of Uranus, and that the orbit is unstable; that is, sometime in the distant future Chiron may perhaps interact closely with the gravitational field of Saturn or Uranus and be ejected from that part of the solar system entirely. Gurther calculations will be done later to determine what the fate of Chiron might be. Chiron takes about 50.7 years to circle the sun, according to the latest calculations.

Chiron will next reach perihelion (its closest approach to the sun) in February 1996, according to the calculations, at which time it will reach magnitude 15. This means that it will be visible thorugh amateur telescopes. Its last perihelion was in 1945, when it was 8.5 astronomical units from the sun. (1 AU approximately equals 93 million miles) Its last aphelion, or farthest point from the sun, was in 1970 when it was 18.9 AU from the sun.

Jan. 13-14

Jan. 15

Continued from page one

Encore

be screened until March 6. On Tuesdays till Feb. 7 will be two Woody Allen films.

Their most impressive selection is the 'definitive Bogart retrospective'. From Jan. 18 till March 25 every Wednesday and Thursday night with the final week including Friday and Saturday, there will be Bogey films, 23 in all. The first show on Jan. 18 is John Ford's Up The River which was the screen debut of both Bogart and Spencer Tracy, the only film they appeared in together. In addition, for the people who enjoy previews of coming attractions, also presented with the film will be trailers of all the other Bogart films to be shown. Plus, as an added extra, another Bogart film will be shown, but they haven't released the title. All they will say is that the film is a very rarely seen classic. Now if all this doesn't sound very appetizing, the entire evening is

CAROLYN PEYTON

XSTATIC

ZIPPERS

CRIQUE

9081 SANTA MONICA BLVD., L.A. 276-6168

CHEESE & CRACKERS

After the Bogart retrospective, the next in depth screening of one person's films will be Gary Cooper, which starts March 29 with High Noon and Friendly Persuasions. The rest of the dates throughout the three months includes a varied selection. There will be several Monty Python, and Marcel Carne's Children of Paradise. There will also be films from directors like Bergman, Truffaut, Lang, and Bunuel. The people who run the theater are friendly and personable and very eager to serve you. Now for the catch; if you have gotten used to the Rialto for only \$2 or have succumbed and given in to the Nuart for \$2.50, then prepare for a shock, \$3. Certainly this is higher than their competition, but it's still lower than the first run theaters where \$3.50 or \$4 is the going rate.



THE HAIR CUTTERS

HIS AND HERS OPEN EVENINGS

449-6967

449-1022

1009 E. COLORADO PASADI NEXT TO THE ACADEMY THEATRE PARKING IN REAR PASADENA



33 N. SYCAMORE AVE. HOLLYWOOD, CA. 90038 (213) 464-4322

1 blk E. of La Brea-1/2 blk S. of Santa Monica Blvd. Hours-12 Noon-5:30 P.M. Monday thru Saturday

(213) 464-4322 of A/Mastercharge honored

Computer & Audio Store on premises

AUDIO-VIDEO R-TV-FILM ENGINEERING RECORDING ARCHITECTURE CIVIL SERVICE ASTRONOMY ENERGY OPTICS-LASER FIX-IT-SAMS SCHAUMS-KEN ARCO-TAB MAGAZINES

Clip and Save Trans Tuneup \$25.00

PASADENA TRANSMISS

26 N. Hill Ave. 792-6104 Member 288 Get Our Price And Guarantee Before You Buy! PASSENGER CARS — 2 YEAR OR 24,000 MI. WARRANTY

Tree increases misterion	
ALL CREV. POWER CLIDES 63-76	
ALL GENERAL MOTORS TURBUE 300 64-69	
ALL CEMERAL MOTORS TURBINE 350 & 400 64-76	
ALL C-4 FORD/MERC (SMALL CARS) 64-76	
ALL C-6 FORD/MERC (LARGE CARS) 66-76	
ALL CHRYS. PRODUCTS 6 CYL 62-76	
ALL CERYS. PRODUCTS 8 CYL 62-76	
ALL AMC PRODUCTS 62-76	
ALL SEALED TORQUE CONVERTERS Amer. cars	
CALL FOR FOREIGN CAR PRICES, FREE ESTIMATES	
TAXES & FLUID EXTRA. FINANCING AVAILABLE.	ELEVANIERICANO.
FR WHEEL DR NOT INCL. SE HABLA ESPANOL	

THE ASCIT FRIDAY NIGHT MOVIE

Rocky Horror Picture Show

7:30 p.m. & 9:30 p.m. in Baxter Lecture Hall ISSION: 50¢—ASCIT members \$1.00—anyone else

NEXT WEEK

Thunderbolt and Lightfoot



Today's problems are complex, the search demanding. Los Alamos Scientific Laboratory is committed to the concept that America's greatest resource lies in its people.

Los Alamos is not looking for employees with assembly-line imagination, but those who will dare to question the obvious, and reach for dreams yet undreamed.

Our special search is for innovative, safe sources of energy created through our Laboratory's brainpower: energy alternatives such as

- Laser Fusion
- Magnetic Fusion
- Geothermal
- Solar
- and others still in the conceptual stage

It's your future! Make your mark with us.

Los Alamos representatives will be conducting interviews Thursday and Friday, January 19-20, 1978 at the Placement Office, Dabney Hall Building 8-40, or write to:

> Los Alamos Scientific Laboratory Recruiting Division P.O. Box 1663 Los Alamos, New Mexico 87545



An Affirmative Action/Equal Opportunity Employer, Women, Minorities, Veterans, Handicapped Urged to apply. U. S. Citizenship required.

How Evelyn Wood Reading Dynamics gives you a competitive edge in school.

School at any level means reading . . . lots of it. Keeping up with thousands of pages can take a heavy toll in time and energy, and grades. If you're typical, you read 150 to 350 words a minute. But how do you get ahead of the rest?

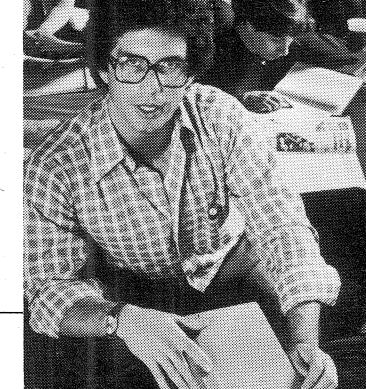
Evelyn Wood can triple your reading rate and improve your comprehension and study skills.

Hundreds of thousands of students use the Reading Dynamics Method. They find reading less of a chore. Concentration and retention improve, which can lead to better grades. A competitive edge is important . . . too important for you to delay.

Prove it to yourself today!

Whether you're thinking of grad school or the job market, or if you want to keep up with course reading today, let Evelyn Wood Reading Dynamics give you a competitive edge.

In fact Evelyn Wood guarantees that you will triple your reading rate if you follow the course correctly, or your full tuition refunded. That s our competitive edge.



Attend a free Evelyn Wood Mini-Lesson® at:

WINNETT STUDENT CENTER—Clubroom One

JANUARY 16, 17, 18 Mon. Tu. Wed.

TIMES:

7 pm and 9:30 pm

\$100 STUDENT DISCOUNT — CAMPUS CLASS ONLY Plus,

RAFFLE FOR A FREE SCHOLARSHIP SPONSORED BY: ASCIT

Student discount applicable to students, faculty, and staff



Evelyn Wood Reading Dynamics. The Competitive Edge.

Copyright 1977 Evelyn Wood Reading Dynamics, Inc.

Second-Class Postage paid at Pasadena, California. The California Tech is published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc., Winnett Student Center, Caltech 107-51, Pasadena, CA 91125.