



Mud slinger and Junior Class President Fred Vachss is finally slung into the billowing quagmire at the conclusion of this year's fearsome Mudeo. For more Mudeo fun, see page 5.

Frosh Make Mud Pies

Sophs Soiled In Mudeo

By J. R. Frosh

Keeping up a years-old tradition, the Freshmen grounded the Sophomores in last Sunday's Mudeo, 5-2. The feral Frosh, faltering at first, came back to sweep the last crucial points from the sophist sops.

The air temperature was about sixty degrees and the mud was about the same as the first contest, or rather, rout began. The Frosh, while exhibiting mass quantities of enthusiasm, were slowly dragged under by the Sops in the tug-of-war, 1-0.

Next came the sack race, worth one point. It consisted of both teams' members trying to struggle through the pit in large sacks. The winner was the team whose members all made it to the other bank first. Many innovative (bordering on perverse) techniques were employed, such as the thrust-and-grunt method. In the end, though, the Sops prevailed, ramming helpless Frosh into the quagmire.

After a brief delay to freshen the brown colloidal suspension, the wheelbarrow race occurred, worth one point. As advertised, many Techers had the chance to examine the mud closely (and some to experience inhaling same). The tide turned as the Frosh, who really understood this race, won handily.

Chicken-fighting was the next event, a two-pointer. The gist of this contest was to keep as many of one's team's horses-and-riders standing while dismantling as many of the opponents' as possible. Some of the contortions that these people went through would be hard to describe without advanced topology and the Frosh, being naturally limber in their element, crushed the Sops.

The last event (finally, as the mud neared the freezing point) was the tire spree, worth two points. This would determine the overall winner. The point of this exercise was to

nab as many of the tires floating on the rapidly hardening mud as possible and then defend them from purloinment by the opponents. The Frosh stood by their tires like trolls and ultimately out-tired the Sops, whose only consolation was that they needn't bathe for another year. As a culmination to this year's festivities, Junior Class President Fred Vachss (not unfamiliar with mud-slinging) was himself slung into the slimy mess by a horde of tired but energetic sophomores.

Solar Ch Is Hot Stuff

by Doug MacKenzie

Solarchemistry was the subject of a free illustrated lecture for high school students last Wednesday in the Baxter Lecture Hall. Dr. Harry B. Gray, who specializes in this field, presented the topic and kept the talk lively and informal.

Gray (who didn't dress up in a costume as he often does) started off by giving a comparison of the energy sources in 1975 and the projected energy sources of the year 2000. Five years ago, 94% of the U.S. energy was from fossil fuels with nuclear and hydroelectric energy contributing 3% each. Solarchemistry provides about 0% now and optimistically may provide 1 to 2% by the turn of the century.

He continued by stating that there are basically three types of solar energy. The first turns light directly into heat, such as with the upholstery of a car becoming hot in the sun.

ON PAGE 5
CONTINUED

Interhouse Carried Out With Much Vim

by Philbert

Last Saturday marked the return of Caltech's ancient tradition of Interhouse, where members of the student houses construct extravaganzas along various themes. Students sacrificed their studies for this bizarre ritual and as a result this year's Interhouse proved to be a bit more complex than previous years.

Page House added an unusual touch to their usual theme of a ride through an alley by making a "bobsled" that ran on two refrigerated troughs of ice. The ride was not in operation until after 1:00 a.m., because of technical difficulties, such as the counterweight used to accelerate the sled falling up and denting the ceiling. When the ride finally worked, members of Page were stationed along the ride to push the sled, ostensibly for extra speed, but actually to get the sled to the other end of the alley.

Dabney recreated the American Embassy in Teheran. With about one hundred onlookers, the Darbs reenacted the embassy takeover, released a helicopter which crashed into the courtyard, and set off enough explosives to level the embassy.

The Scurves were very organized this year; they had their bar and various inebriated guests cleaned up by Saturday morning.

Blacker flooded its courtyard, constructed a dock and lighthouse, and hung a fishnet over its lounge to complement the nautical motif. The Moles put on skits that

played in a full, er, lounge. Page, Lloyd, Dabney and Ruddock had live bands and dancing. Lloyd had a sorcery theme. Ruddock flooded its courtyard, built a bridge and had a Loch Ness monster-at least for a while. Ruddock also did not seem to have much in its lounge, except for a bar.

Fleming, amazingly, outdid previous Interhouses with its "Apocalypse Now" theme. The Flemings put on a play which had nearly the significance of a Broadway play. The temple

and bridge built in the flooded courtyard very closely resembled the swampy river, temple and bridge of the movie. It was rumored that a refugee from Hollywood had helped design the sets for the courtyard, but a spokesman for the Big Red Bobsled Machine commented, "No, he didn't have anything to do with it." Even the lounge, such as it is, was decorated as an army barracks. [So that's what it was!-eds.] The total effect was the bridge being blown up at the end of the night.

Humanities Adds Courses

By Leslie Grate

The Humanities department is adding four new courses for the next terms.

Lit 108 sec 2. R. Splitter, *Creative Writing*. This course will be taught as a fiction writing class instead of the normal poetry writing class.

H 161 sec 1. A. Rose, *American Religious History*. This course will explore the major religious movements in U.S. history and set them in a social context.

H 161 sec 2. M. Ridge, *American Biography*. This course will explore the major methods of American biographical writing. Prof. Ridge is a member of the Huntington Library staff and has just joined the Caltech faculty.



Fleming House's Interhouse theme, *Apocalypse Now*, featured a flooded courtyard that simulated a swampy Cambodian river.

EDITORIAL

The orthodox line one hears when questioning the merit of an academic institution is that every university has its share of excellent professors and its lot of abysmal ones. This attitude, however, does nothing to alleviate a potentially bad situation, and students will continue to feel confused and angry when they are "screwed" by unjust grading policies and worthless lectures. Consequently, at an institute the size of Caltech, the student body is acutely aware of which professors are terrible, and these people become the focus of a great deal of negative thought (witness the triple turkeys in the TQFR).

Curiously enough, one's gut-level reaction to a particularly callous professor is often stronger than the situation warrants. This is because when one is repulsed by a person, one is expressing a certain disgust at an aspect of the self that he or she wishes to hide or to destroy. People see themselves reflected in those around them, and their likes and dislikes are predicated on their internal conflicts and harmonies. For the most part, this is an unconscious process, because as soon as one has identified a troubling feature of one's personality (having in a sense, named it), one has made the first step in overcoming that aspect. Likewise one will endeavor to cultivate one's positive tendencies. The goal of an individual's identity struggle is to recognize the currents of the mind.

There is a class of spiritual entity that enables people to do just that, and such beings are known as Tors or, more commonly, "Devil's Advocates." The Devil's Advocate manifests itself on the material realm in the guise of a human who makes it a practice to do bad works and in doing so, it becomes the focal point of negative thought. Its purpose in this is twofold. As a focus of negative thought or energy, the Devil's Advocate diverts this sort of force away from spiritually weaker beings (such as humans), who might be damaged by the crossfire. Of more import and relevance to Caltech, though, is the primary role of these entities. By behaving despicably and summoning up the baser emotions in

those around them, they become mirrors of each individual's soul and force one to come to grips with the darker sides of oneself.

The point of this consideration is to suggest the very real probability that at least some of the professors at Caltech that are generally considered to be spiteful jerks are in actuality Devil's Advocates. When a professor abuses his grading prerogative or prevents a student from graduating because of curriculum technicalities, people should be aware that his actions are motivated out of a pure, seemingly incomprehensible love. Even in the situations where this is not true, belief in this model will undoubtedly alter events in a positive direction.

—Stuart Goodnick

LETTERS

The Key Problem

To the Editor:

The recent article in *the California Tech* quotes me accurately, but before I am prematurely given the triple-turkey award of the year, I would like to add some reflections on the security problem.

I do not object to a responsible student carrying a master key, but I do object to 500 or even 200 persons carrying a master key *no matter who they are*. It is not a matter of trust, it is a matter of security. It is not possible to have this many keys in circulation without some being unwittingly loaned to someone not worthy of such trust and without some being lost. A substantial number of campus master keys come into my possession regularly due to their loss in the vicinity of Steele Laboratory. Since I am not even the appropriate recipient of a key when found, and since the Steele area is a small part of our neighborhood, the total number of lost keys must be very large. These keys are readily recognizable as masters even to a person not cognizant of the details of the campus lock system. This leads to the conclusion that the campus lock system cannot give any real security under our present rules.

In discussions with students, I find there are a

number of reasons given for wanting a master. I list a few in some order of apparent relevance.

- (1) access to a library.
- (2) access to a building to submit an exam under a professor's door in hopes that it will not be considered late.
- (3) access to a Xerox or other Duplicating machine.
- (4) access to a building to look for someone.
- (5) access to a classroom.

- (6) it is neat to own a master even if it is rarely used. If the Institute had a sensible lock system it would not require a master for any of the above except (6). (There is a further problem with (3)—see for example Lulu's article on page 4 of last week's *Tech*.)

Let me try this idea out on the student body. Suppose a key was available for the asking that gave access to building, library and classroom for one of our laboratories. A "submaster" for this building would only give additional access to secretarial offices and professorial offices and laboratories. It currently is a violation of the honor system to use a key to enter *any* of these areas. Would it not be reasonable to make it a violation of the honor system to even make, own or possess such a key since it *only* gives

THE CALTECH Y fly-by

Today, Friday, November 14, P. Pat Productions brings to you once again a NOON CONCERT. Today's feature is Blue Guitar, a modern jazz band. So come out to the Quad and enjoy the music.

Monday, November 17, there will be an EVENING PANEL DISCUSSION. The topic will be "The Legislation of Morality" with Vic Veysey and Reverend Al Cohen presiding. At 8 P.M., in Winnett Lounge.

Wednesday, November 19, is the day for an UPDATE Noon Discussion. This week's speaker is Dr. Derek Fender; his extremely interesting topic, "Localization of Brain Activity." This starts at noon in Clubroom One. Feel free to bring your lunch (and eat it, of course).

Thursday, November 20: The Y presents an EVENING DISCUSSION with Wes Hershey, director emeritus of the Y. Wes will lead a discussion on the topic "What Gods Do You Worship?" This event starts at 7:30 P.M. in Clubroom One.

Saturday, November 22: the Y is sponsoring a trip to the J. Paul Getty Museum. Uncle Mike will once again lead this DAY TRIP. He says to meet him at 10 A.M. behind Winnett. Sign-up begins today (Nov. 14), in the Y Office. Transportation will be provided by the Y and, by the way, the tour is free (bring money for lunch).

access proscribed by the honor system? If we cannot get agreement on some such idea, then it is clear that we cannot have security at Caltech.

Since it seems we cannot operate our present Steele system in a satisfactory way, propose that the system be abandoned until the Institute can find a security scheme acceptable to the entire community.

—Charles Wilts

P.S.: I am not a "mastermind" of the Steele lock system, I am not even a locksmith. Our Medeco system was not designed to prevent duplication of keys and not to prevent a person from "breaking" the code—this is clearly impossible. But the lock is *really* pick-proof (not in the technical sense, but in the practical sense); submasters cannot be made by filing down, and keys are not easily duplicated. These features gave us reasonable protection from off-campus thievery. We had hoped that by making a building key available to anyone who asked for it we could remove the incentive for students to make a sub-master which could not be used under our honor system.

The California Tech

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Since I began writing this column, most of the feminists at Caltech have called me on my overt sexism. As you may recall, my first piece was on chasing girls, and brought me sufficient infamy to provoke the eds. to brand my column "Cherchez la femme" for all time. Last week, tongue inserted rather less delicately in cheek, I wrote about the defeminizing of Caltech women by academic forces. Having been so thoroughly called to account for my opinions, I thought it might interest the community to find out what lies in the mind and heart of a hard-core sexist.

I wasn't always proud of being a sexist. I even used to think women were just like men inside. When I got inside and took a look around, though, I was embarrassed to learn it wasn't so. I hid my feelings from others for a long time, although I realized I was actually repressing my most important feelings. I was a classic closet sexist.

I feel women are basically and of their deepest nature different than men. Vive la difference! The difference can't be pinned down very precisely, of course. That would put our best poets out of work. Still, I find myself compulsively drawn to the feminine aspects of life, all the more so at a very male-oriented school. Life seems dreary as ditchwater without women.

I'd like to point out to my feminist friends, those few who remain, that I've lambasted male and female Techers alike for their neutered demeanors and casual misanthropy. I am a thoroughly unbiased sexist. I do distinguish between those who subvert their instincts and those whose sexuality is evident. I discriminate for the sensualist in each of us, animal though it be.

The ancient Chinese concepts of Yin and Yang long ago established the flagstaff upon which fly the true colors of

masculinity and femininity. Although I am not an ancient Chinese, I will attempt to convey a rough translation. This will serve to root my biases in time-tested wisdom.

In my copy of the *I Ching*, Yang is connected with male, firm, strong, active and light. Likewise Yin is associated with female, yielding, weak, passive, and dark. These sound suspiciously like the categories feminists abhor. Is the wisdom of the ancients outdated? Will a new order of women, strong and active, soon rule over passive, yielding men? Or will the inner nature of man and woman change so that they are truly equal in all ways? I don't think so.

I don't wish to short the feminists. All women have a basic right to be respected, to be given a chance to express themselves fully. Women today in our country are making great progress toward achieving recognition for their talents,

and much more is yet to be gained.

Equality is another issue entirely, and one which I suspect won't be realized until genetic engineering is much further advanced. Women will not achieve their rights by trying to be men or by trying to beat men at men's games. A feminine woman is at a strong advantage in this country because she sets the rules men will play by. A masculine woman rarely gets ahead. That's just the way it is.

Furthermore, I feel the application of Yin and Yang to humankind is widely appreciated and embraced by Americans everywhere. Our movies are full of husky headstrong men and supportive sensitive women. We can't ask producers to change their archetypes—we chose them in the first place. Romantic ideals die very hard, or perhaps they can never die at all. America was built by husky headstrong men, each with a strong woman standing behind him. So, I imagine, was Jericho.

Let me put all this back into a Caltech perspective before I go. Masculinity and femininity are rather maligned commodities here, and unjustly so.

If you just want to be a drab nonentity, neutering yourself is the only merciful thing to do. If you'd like to lead a semblance of a happy, healthy, balanced life while you're here, live dangerously and well. Don't dream it, be it.

And what I said about chasing still holds. Especially for you women. Dare to be as beautiful as you are. And don't look back—you know there'll be someone there to chase you. No sweat. Remember who makes the rules....

—Chuck Nichols

and a leading American authority on Africa, has recently returned from his 52nd visit to that continent, where he has many writer friends. Among the authors he will discuss, whose books have had an impact on race relations in South Africa, are Alan Paton, Doris Lessing, Ezekiel Mpapelele, Mary Renault, Nadine Gordimer, Andre Brink, and Poppy Ngonema.

Munger himself has published eight books and more than 100 articles, and he maintains his own personal Africana Library of 27,000 volumes at the Institute. He is also the author of two as-yet unpublished novels.

The Friends' November 21 luncheon-lecture is open to the public as well as to members. Reservations are required. The cost per person is \$7.50. For information, phone 795-6811, ext. 2411.

Munger To Speak On Africa

(CNB) — The Friends of Caltech Libraries will meet at 11:45 am on Friday, November 21, in the Athenaeum on campus to hear Dr. Ned Munger speak on "Fiction and Race in South Africa."

Munger, who is professor of geography at the Institute

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ENTERTAINMENT

MOVIES plays **SPECIAL EVENTS**

Sinful Performance

The average person at a movie will manage to enjoy the film even if it has many faults. He'll put up with poor acting, minor plot inconsistencies, bad cinematography, and shallow

characterizations. About the only thing he won't tolerate is a slow-paced, boring movie. Unfortunately, all *The First Deadly Sin* has to offer is boredom.

If you're thinking of going to see this movie because you like blood and gore and psychotic killers, don't go. There's not much blood and the killer is just a caricature.

If you're tempted to see it because you like Faye Dunaway, don't go. She's in about five minutes of the film, and has approximately twenty words to say.

If you want to see this movie because you like mysteries, don't go. There is no mystery in this film. The killer is known from the start of the film.

If you're thinking of going to see *The First Deadly Sin* because you like Frank Sinatra, don't go. You'd do a lot better to try and catch him in *From Here to Eternity* on the late show on television. This is probably his worst performance as an actor. He never seems to know how to play the part which is interesting since he also directed the movie.

There might be some reason to see *The First Deadly Sin*, but I can't think of it. Pass this movie by, and use your four bucks for something better.

—Lisa Grenier

Solar Chem

FROM ONE

The problem with this is that this energy can't be stored. The second method tries to form electricity from light with solar cells. This method also has the problem in that it is hard to store the energy produced. The third method, which is the one Gray is working on, uses the light to help turn water into fuel, namely hydrogen. The problem with splitting water is to find a molecule that will help absorb sunlight into a water solution and thereby help the reaction proceed. The molecule must also be a catalyst in that it must not be changed by the completion of the reaction.

MIT and other schools are working with semiconductor electrodes while schools including North Carolina, Brookhaven, and Strasburg are trying to use platinum and a molecule containing ruthenium

as a catalyst. Gray's group is working with a rhodium molecule that looks promising. There are three major problems with this catalyst though. The first is that it is inefficient; only 4% of the photons used help produce hydrogen. The second is that rhodium costs \$2000 an ounce. The third is that the rhodium molecule must be made more durable; durable enough so that it can be used trillions of times before it breaks down.

Gray closed by noting a molecule that could be a new catalyst: a molybdenum complex that is now being worked on by Andy Maverick. It may be used with a paraquat derivative as one of the catalysts to try to produce the much needed hydrogen.

Gray's talk was the second in a series of science lectures for secondary school students given this year at Caltech.

Noon Concert

By Pat Walp

An eight-piece jazz ensemble by the name of Blue Guitar will be performing on the Quad today for the Y noon concert.

The band is led by Mike Price an accomplished trumpet player in both jazz and classical. He is just returning from a successful tour of Japan and the northwestern

U.S. Price composes much of the band's music.

The other members of the band are: Jeff Richman on guitar; Russel Bizzet on drums; Jimbo Ross on viola; Mel Steinberg on saxophones, flute and lyrecon; Tom Fowler on bass; George Bohanon on trombone; and Milcho Leviev on piano.



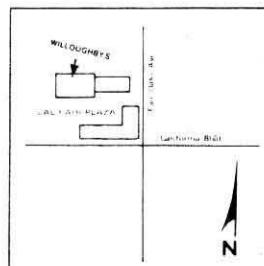
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The powers that be come through with another excellent, but slimy Mudeo.

COMMENTARY

When I came here as a frosh, I immediately liked the smallness of the campus. It was quite unlike the University of California—where administration could not care less whether a student lived or died. Caltech has cared. But even here the administration is changing—although Caltech is small in size, they perhaps feel the bigness of reputation allows them also to care less.

When school opened this fall, I was surprised to find all of the spaces in the Holliston lot were painted over "reserved". The secretary at the security office said this was a new program to prevent students from parking. Supposedly, if there were no unreserved spaces in the lot, the student would be discouraged from parking. I mentioned that perhaps people will park in reserved spaces once they see no unreserved spaces available. I further pointed out that this situation smacked of big school bureaucracy. The secretary replied that this was simply the security office carrying out the policy of a faculty-student committee. How bureaucrats love to hide behind a "committee."

When I returned to my car, I found a security officer waiting. He politely informed me that students can no longer park in the Holliston grad lot without their reserved space. It is interesting that security makes such a disgusting effort to discourage minor parking violations, while they bend over backwards to curry favor with money-paying Athenaeum party-goers, ignoring the complaints of tuition-paying

students.

This type of bureaucracy may be necessary at a gigantic school such as the University of California, but you would expect better from a smaller, more efficiently run institution like Caltech. Now, recent events have shown other pressures besides size may lead to a degradation of faculty and administration responsibility to undergraduate students.

—Eric Chang

Beer Ball

The freshman class of Harvey Mudd College has challenged the freshman class here at Caltech to a game of Beer Ball. This game is exactly like softball except that kegs of beer are placed at first and third bases, which runners must drink from as they go by. Anyone that is interested in organizing a team, please contact Mark Waggoner, room 134, Page House. Phone 356-9111.

Attention Football Fans

This Saturday is Caltech's last game of the season. We will be playing Mexicali. Along with a great win, there will be free refreshments.

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Tour the Getty

By Mike Meyer

For all you culture vultures out there, the Caltech Y is pleased to announce a trip to the J. Paul Getty Museum in Malibu on Saturday, November 22. We have 25 spaces for students, faculty, and staff who are interested in touring this unique museum.

The J. Paul Getty Museum was established in 1953, although its current design was completed in 1974. Modeled after a Roman villa, the Museum holds valuable collections reflecting the millionaire's taste: Greek and Roman Antiquities, Renaissance and Baroque Painting, and French Decorative Art.

Interested persons should sign-up in the Y by Thursday, November 20. Once again, we have 25 spaces on a first-come, first-served basis. The schedule for the day will be as follows:

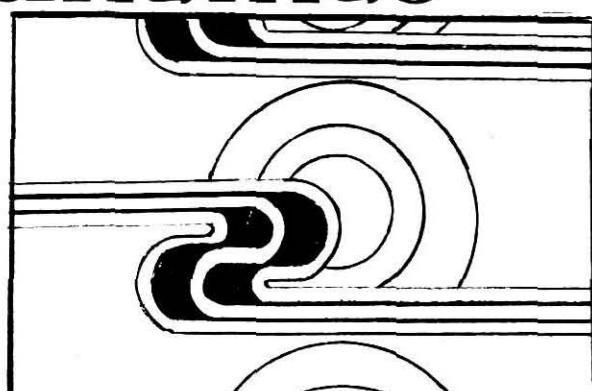
10:30 am—Docent tour of classical antiquities (free).
12:00 noon—Lunch in Tea Room.

1:00 pm—General browsing through Museum and Bookstore.

3:00 pm—Back to Pasadena.

There is no cost for the entire day with the exception of lunch (\$2-4) at the Tea Room—a requirement since the Museum does not allow bag lunches. You may also wish to make a purchase at the Museum bookstore. Photography is allowed, but flashbulbs are not. You are also requested to use the transportation provided by the Caltech Y, since the Getty Museum requires parking reservations. So hurry, don't wait...call the Y at x2163 or go on up and sign up yourself.

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Motivation: the drive, energy and desire to accomplish something. This miracle ingredient, in the proper quantities, is responsible for both the completion of day-in/day-out work and also exceptional flashes of greatness that stand out from the ordinary.

Motivation: an element of life which is often thought to be in short supply or altogether non-existent in the vicinity of the student houses. Witness the number of people laying around on floors or other places of low energy, wanting to get up and get out of the hole that classes have put them in. See a number of people attempting to alter their motivational quotient, either to increase their will or to sap it (with undoubtedly pleasant side

effects) through chemical technology. Hear a continual grumbling from the student body, as with a large number of hungry bellies, while each student ponders why he or she isn't motivated as much as he or she used to be.

Motivation: the driving force behind possibly every prank, RF, and crazy stunt that is an integral part of Caltech: bonfires, stacks, climbing buildings, you name it. The casual onlooker would probably tell me that Caltech is just bursting with motivation. And they'd probably be right.

Paradox: a seeming contradiction. Why is it that, in the midst of cries about lack of motivation, incredible amounts of the stuff must be laying around campus? Tentative answer: motivation is where

you find it.

In keeping with the above ramblings, I would like to propose some basic theorems about motivation:

First Theorem: Motivation is conserved. In a closed environment, $dM/dt = 0$.

Second Theorem: Motivation is a vector, not a scalar. After a while, students are often conditioned to complete apathy in regard to studies, attending lectures, etc., while simultaneously engineering the latest in a series of RF's. This leads one to believe that motivation has direction as well as magnitude.

Third Theorem: Motivating factors are specific to individuals. A piece of cheese made Algernon the mouse run a maze; it wouldn't do much to convince me to do the same.

Fourth Theorem: If you've read this far, you are definitely motivated.

See you next week. Meanwhile, go to sleep.

—the realist

Christopher Robbin

By C.R.G.

Spontaneity! What a simple word, a word that holds as much wonder and marvel as a baby's first breath or man's first step on the moon. Inside every person is that *little kid* who wants to ride a bike fast, play hookie, or go to Disneyland. But how many times do we let our inner self go? When's the last time you went somewhere just because you wanted to? Not because you had to, or because you said you would, but just because *you wanted to?*

This is for all of you who don't grab the prettiest girl in sight and go out on the dance floor. This is for those of you who never hiked to the top of Mt. Wilson. This is for those of you who haven't sung your favorite song out loud while

walking down Lake Street, in other words, for all of you who don't possess uninhibited wills, *for those of you who aren't spontaneous!*

Listen to me very carefully. I want you to think of your favorite song. Just sit back and think, it'll come to you. Did you sit back? All right open your mouth and *sing*. I bet not one of you sang just then, and why? Because you lack spontaneity. No, it's not because you have a terrible voice (it might be true). It's not because you thought the people sitting around would think you'd lost your mind. And it's certainly not because you forgot the lyrics.

Spontaneity is instinctive. Holding yourself back is the *learned response*. You've got to relearn to be spontaneous. You've got to do things that you want to do, without thinking about all the results. Do it because you want to. Because you *really* want to. What would you like to do right now? Nothing complicated, just something to enjoy yourself. Now *do it*. Just like that. Simple isn't it? No, don't think about all the things you should be doing instead. If you think hard enough, you can convince yourself of *anything*, to go, or to stay. But that's just it, you shouldn't have to convince yourself. Just go and do it.

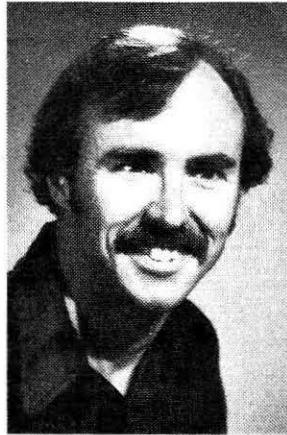
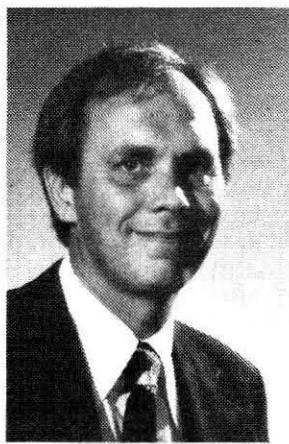
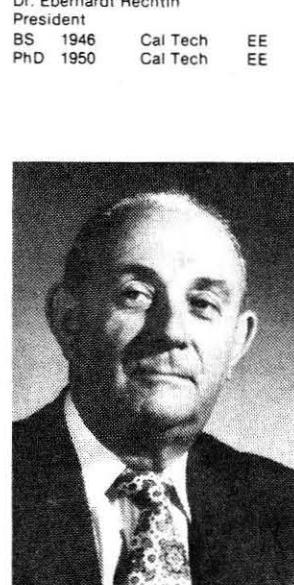
Spontaneous:

Proceeding from natural feeling,...produced without being planted,...without deliberation...lack of prompting, acting unconsciously as or as if by instinct.

You've got to start doing things on a spur of the moment. Do it...just do it. It sounds so simple doesn't it? That's because it is simple, so simple. Think about it. You've been given a free will and an active mind. Doesn't that combination alone tell you something? Believe it or not, you only get one life on this planet. Shouldn't you enjoy it whenever possible?

How many things have you been continually putting off that you want to do? The reason for postponement makes no difference. Do one *now*. If you were really spontaneous, you wouldn't be reading this. You'd be on your way to it. But for those of you who are still sitting

**CONTINUED
ON PAGE 7**



Dr. Eberhardt Rechtin
President
BS 1946 Cal Tech EE
PhD 1950 Cal Tech EE

Dr. Artur Mager
Vice President
Engineering Group
BS 1943 University of Michigan
MS 1951 Case Institute Tech
PhD 1953 Cal Tech Aeronautical
Aeronautical
Aeronautics-Physics

Dr. Donivan R. Howard
General Manager
Defense Development Division Office
BS 1958 Purdue University
MS 1959 Cal Tech
PhD 1963 Purdue University EE
Propulsion Systems
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Cross Country Finishes Up Its Fine Season

By Gordo

The cross country team wrapped up its season at the annual NAIA District 3 Championships at Biola last Saturday. In the Men's Championship Caltech ran sixth among the eight competing schools (there are 20 schools in the NAIA District 3). True to form, Karl Clausing ran first for Tech, taking 11th place overall, the first All-District performance by a Caltech runner since Greg Griffin did it in the early 1970's. Second for Caltech was Eric Korevaar, who cut 1:12 off his course time in the last race of his distinguished cross country career. In third was the resurgent Vince Cammarata, running his best race since the Pomona dual meet. Just four seconds behind Vince was

Steve Stahl, running in his first race of the season, after a two-month-long knee problem. Fifth in scoring for Tech was Rob Murphy, who came on like wildfire at the season's end. Shawn Larsen ran sixth, completing an excellent season for himself. Paul Eskridge rounded out Caltech's varsity squad in seventh. Point Loma was, again, district champion, and will go to NAIA Nationals, as will the one Cal Lutheran and three Azusa Pacific runners who were among the top seven. Caltech did achieve some measure of revenge by defeating Redlands, who had beaten us in a dual meet and at SCIAC this season.

Caltech had two runners in the Women's Invitational, held before the men's race. In

seventh place overall was Karen Close, thus being, if unofficially, on this year's District 3 first team. Carlotta Paulsen ran 15th overall, just missing second team honors. This was the first year for a Women's NAIA race, and there are plans for it to be a Championship meet instead of an Invitational in future years. Since Tech had only two runners, they took last (sixth) place by default.

Although the team did not do as well this year as it had in previous seasons, it was a good year in many ways. Those runners who managed to stay whole, healthy, and eligible all improved enormously. The nucleus has been created for a fine squad next year. With a little less bad luck than this year the team could be back as

one of Caltech's few winners next season. This Saturday evening the team will have its annual awards banquet in the new Caltech Alumni House. Presentations will be made of the Paul Barthel Memorial Award for achievement, leadership and dedication, Most Improved Runner, and whatever other awards Coach Neal can come up with.

Men's Scores

POINT LOMA	29
AZUSA PACIFIC	68
CAL LUTHERAN	79
WESTMONT	79
BOLA	143
CALTECH	170
REDLANDS	176
UCSD	176

(Caltech's places: 11th, 34th, 40th, 41st, 44th, 47th, and 49th in the men's meet.)

Women's Scores

POINT LOMA	36
UCSD	70
WESTMONT	79
BOLA	91
AZUSA PACIFIC	95
CALTECH	ONLY 2 RUNNERS (Caltech's places: 7th and 15th in the women's meet.)

Chris Robbin

FROM six

there, I'll keep trying to get you off your duffs and out enjoying yourself.

Why are you still sitting there? I mean that as a question for thought. Is it because you couldn't think of anything you wanted to do? Mabe you didn't take me seriously, or you didn't take yourself seriously.

For those of you who didn't understand what the last paragraph meant and are still sitting there, read it again.

Still here!? Boy, you must be slow. If a feather in the ear doesn't work, kick 'em in the side of the head. Get off your butt damn it and live! You don't realize how little time you have on this rock! Get out, go places, do things. Don't always think about it first. You use too much of your time thinking already. Grab that girl and dance with her, jump in your car and go to Las Vegas. Snatch that book that's been lying there; you've wanted to read it for weeks. It's not going to wait much longer. Life isn't going to wait. It's here now. Live it.

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Engineering Scholarship

The 1981 Engineering Scholarship Competition co-sponsored by the American Consulting Engineers' Council and its state affiliate, the Consulting Engineers Association of California is now open. To qualify as an applicant, a student must be: scheduled to enter his or her third, fourth, or fifth year of undergraduate study in the fall of 1981; working towards a B.S. degree in Engineering; in the upper half of his or her engineering class; interested in pursuing a career in Consulting Engineering; a United States citizen. Deadline for applications is February 20, 1981. Further information and applications available in the Financial Aid Office, 208 Dabney Hall.

Bi 23

The list of Biology tutorials (Bi 23) to be offered next term is now available outside the Biology Office, 156 Church, and outside Rm. 12, Beckman Labs. The tutorials are staffed by Biology faculty, postdocs and grad students. They provide an opportunity for learning through personal contact in a small group situation and cover a broad range of subjects. Bi 23 may be taken for up to 6 units; grading is pass/fail. For details, see Ron Konopka, Rm. 12, Beckman Labs.

SHAC(k)ed Up

SHAC will be having a meeting Wednesday, 19 November at 4PM at the Health Center

Personals**BOC,**

I humbly apologize for maligning your character and integrity Wednesday night. Please forgive my rash statements. I realize that I made a gross error in judgement by speaking out when half of your people were in attendance. However, don't you think you may have taken unfair advantage of me? Imagine the humility I'm now forced to face after having been drinking fountained.

Sincerely
IHC

NUCLEAR REACTOR MANAGEMENT TRAINING: OPENINGS/OPPORTUNITIES

Department of the Navy, Division of Nuclear Reactors is accepting applications for nuclear propulsion management trainees for openings beginning in June 1981.

Additionally, College Sophomores or Juniors can apply and if screened successfully, can qualify for up to \$800 a month retainer until completion of college. (Also available to grads in masters programs.)

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***** all the news that fits in print *****

Space Cadets Wanted

The National Space Club will award a \$3,500 scholarship for the academic year 1981-82 in memory of Dr. Robert H. Goddard. Applicants must be U.S. citizens, in at least the junior year, and have the intention of pursuing undergraduate or graduate studies in science or engineering during the interval of the scholarship. Other selection criteria include academic achievement, letters of recommendation, accomplishments demonstrating creativity and leadership, interest in the aerospace sciences and technology, and personal need. Interested applicants can apply by letter no later than January 12, 1981. For further information and application instructions, please come to the Financial Aid Office, 208 Dabney Hall.

Where's Your Head?

Wednesday, November 19, 1980, the Caltech Y's Update Noon Discussion Series will present Dr. Derek Fender, Professor of Biology and Applied Science, speaking on "Localization of Brain Activity." Dr. Fender will be discussing his research on brain waves. By locating the source of brain waves related to certain acts, he can determine the function of various parts of the brain. The program is at noon in Clubroom 1, upstairs in Winnett Center. Bring your lunch. Watch for handbills and notices in the Tech announcing future Update talks

Found

One orange and white, very noisy kitten in Fleming House. Call Susan, x2830.

Seniors

Any senior interested in applying for a Churchill Fellowship should come talk to David Wales or Chris Wood soon in 210 Dabney Hall. The deadline for applications is Friday, November 21.

Comedy Hour

If you like math, come to this year's first Math Club meeting. Dr. Brock Fuller will be giving a talk "Algebra, Analysis, and Topology contend for the soul of Kirchhoff's Theorem" at 7:30 in 351 Sloan, Tuesday, Nov. 18. All are invited and refreshments will be served.

Jobs! (Off Campus)

Excellent experience: "go-for" in a patent attorney's office, 5 minutes walk from campus. 8-10 hours per week, \$5 per hour. Apply in the placement office.

Take it easy...house-sit occasionally on the weekends. Apply in the placement office. Wanted...a robot developer...salary open. Company in Monrovia needs you.

Visit your friendly Placement Office, Room 8, Dabney Hall. The budget you save may be your own.

A LIT-tle Error

Lit 130b was inadvertently omitted from the preregistration list of courses for the second quarter. The course will be taught by Professor Splitter in conjunction with Psyc 101. Course credit may be applied to the 108-unit HSS requirement, but not the 27-unit Humanities or Social Science requirement. The course will consist of an intensive study of major nineteenth and twentieth century works of fiction—by Dostoevsky, Proust, and Kafka—from a psychoanalytic point of view. With background reading in psychoanalytic theory.

Vice Laws

There will be a panel discussion Monday night on "The Legislation of Morality." The speakers will be Vic Veysey, former U.S. Congressman and current Caltech Director of Industrial Relations, and Rev. Albert G. Cohen, campus minister at Cal State Los Angeles. The joint program of the Caltech Y and the Caltech Christian Fellowship will start at 8:00PM, Monday, November 17, in Winnett Student Lounge.

Work-Study

Just a reminder about college work-study jobs—see Mrs. Rea Jensen in the Placement Office, Room 8, Dabney Hall for further information.

Jobs for Pre-Meds

The American Heart Association Summer Program is to encourage and introduce gifted science students to consider careers in cardiovascular research. Selected students will be assigned to leading research laboratories in California for a ten-week period. The applicant must be enrolled in an academic institution in California (Caltech does qualify) or be a resident of the state. Preference in selection will be given to students who will have senior status in the fall of 1981. Applications must be requested by January 15, 1981. Please see the Placement Office, Room 8, Dabney Hall, for further information.

GDG

The Caltech Gay Discussion Group will participate in a potluck dinner at PCC on Friday, Nov. 21. For details, attend the Nov. 14 meeting at 7:00PM in Clubroom 2 or contact Greg Hullender in 210 Lloyd (578-9166).

Our Feynman...

Over the years, the Caltech Y has presented a number of programs exploring science, religion, and psychology. Thursday, November 20 at 7:30PM, the Y will be hosting another such discussion, this time with Wes Hershey, the Director Emeritus of the Y. He'll be discussing "Science, Mythology, Religion: What Gods Do You Worship?" in Clubroom 1 in Winnett Center.

Wes Hershey came to Caltech in 1946 as the Director of the Caltech YMCA after studying at the Yale Divinity School. During his thirty years here he started many of the programs the Y continues to run today. Besides running the Y, Wes has also maintained a very active interest in Psychology and Psychotherapy. Now retired, he is studying at the California Family Study Center, pursuing a masters degree in psychology.

The discussion Thursday will be wide-ranging, covering everything from personal belief systems like science and religion to Jungian interpretations of mythology and dreams. The program will be a flexible, informal, informal discussion. Bring your interests and ideas for a free ranging program Thursday evening in Clubroom 1.

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