

Here we
go again

the Insecure
california

tech

... Mike,
our New B.M.
(+ Mark, layout troll)

Volume LXXXII

PG PARENTAL GUIDANCE SUGGESTED
SOME MATERIAL MAY NOT BE SUITABLE FOR CHILDREN

Pasadena, California; Friday, April 10, 1981

Number 22 23

Clean Up Your Act

By David C.

In a move prompted by President Reagan's apparent lack of concern about environmental issues, CEAC has been revived. The initial meeting of CEAC (Caltech Environmental Action Council) was convened Monday night by Pat Coin (Ricketts House). CEAC is concerned with the prospect of a deteriorating environment in the near future.

In an informal discussion of priorities, attention was focused on impending revisions in the Clean Air Act of 1972, the Clean Water Act, and changes in the federal oil leasing policy (mentioned were potential drilling sites in the Point Reyes, and in the Channel Islands areas). Suggestions centered around the formation of an 'action group'. Such a group would keep up to date on pending legislation, and decide, in each case, who the key lawmaker is, or which subcommittee would be holding hearings on the issue. CEAC's efforts would then be focused in that direction.

Letter-writing campaigns were stressed as a primary tool, as one person put it "...think of it...flooding a senator's mailbox with thousands of letters...just like the McDonald's 'F...wow!' Having an 'Earth Day' celebration, and combining forces with UCLA/USC were also mentioned as possible activities.

CEAC will hold weekly meetings (Monday at 7:30 pm in Clubroom 2 of Winnett Center), and will be declaring an 'issue of the week' which will be the focus of that week's discussion and/or letter-writing campaign.

Students' Discount Just ASCIT

By Susan Hunts

What are the discounts available to you, a Caltech student? For most events here at Caltech, students are entitled to 20% off on tickets purchased in advance. "Rush tickets", which become available at 10:00 on the day of the performance (or Friday, if the performance is on the weekend) are only \$3.00 for any seat remaining. These discounts are limited to two tickets per student; if you'd like to buy more tickets, the regular 10% Caltech discount applies.

Some events have different discount rules. The L.S.B. Leakey Lecture Series tickets have a \$1.00 off discount until the day of the lecture when 50 tickets at \$3.00 each are available. There is a \$2.50 dis-

Welcome Back, Tim



Let me hear your balalaikas ringin' out

The Odessa Balalaikas performed in Beckman Auditorium last Saturday. Not content with their namesake, they played a large number of Russian folk instruments in a wide variety of music, from folk songs to Mozart to storytelling.

The group usually played songs rarely if ever heard in this country, but they were surprisingly free of the usual reason for obscurity—lack of quality. The instruments used were equally rare, but also appealing. Similar to the balalaika and almost as much used was the mandolin-like domra. The piano, the guitar, the gusli (a type of zither), and the accordion-like bayan were also used in several songs. The gusli in particular was a beautiful instrument worthy of greater use. The group also sang and engaged in unusual sound effects, such as rubbing the balalaika and scraping sandpaper-like blocks.

The audience received the quintet well from the start, but the program reached its high point near the intermission, with Mussorgski's "Pictures at an Exhibition" and the telling of an amusing tale by Peter Rothe with musical accompaniment by the rest. These two works in particular showed the versatility of the group.

Throughout the performance, Rothe gave explanations of their music and instruments. These were ill-rehearsed, but Rothe was likeable and capable enough to

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ON PAGE 2

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ON PAGE 4

Tau Beta Pi Scholarships for Budget Crunch

by Eric Y. Chang

Looking at President Reagan's many proposed budget cuts, it seems like the financial aid situation at Caltech will not be too hopeful next year. Much of the money needed comes from the Federal Government, in the form of Guaranteed Student Loans (GSL's), National Direct Student Loans (NDSL's), and Basic Educational Opportunity Grants (BEOG's). All these stand to be reduced, threatening a shortfall of funds. Supposedly, these proposed cuts are designed to reduce the tax burden on the individual, and especially the corporation. This will leave them with extra money relative to pre-tax cut days. Thus, the corporations can take more part, like they did a few decades ago, in financing education. It sounds good in theory, but will this really work?

Financial Aid Woes

The Caltech financial aid office is actually predicting a shortfall in funds next year. Last term, it was brought to the attention of the Master's Office Food Service Committee that the future budget was insufficient by \$300,000. This was not including any real increase in board costs that the Committee had been considering. If meal costs were increased by \$1.00 per day, above 12.5% inflationary increases, this would amount to \$5.00 per week, \$50.00 per term, or \$150.00 per year. For 800 students, this amounts to a \$120,000 financial need, worsening the situation. The latest estimate of the shortfall, from Linda Berkshire, Director of Financial Aid, is \$400,000 on loan funds and \$100,000 on grant funds. Some money to make up these deficits is sought from the Federal Government under work study programs.

In general, the funding of financial aid is decreasing. This is actually not too surprising, considering the trend of "tax savings" today. The Cal Grant A is also threatened by cuts. Many graduate schools are no longer offering fellowships, assistantships, or even waivers of tuition. Students lacking funds cannot attend. Besides questioning where the funds go (they have to go somewhere), it may be instructive to look at the effects of the change. Financial aid is a very important part of education. It makes practical the assertion that financial affordability should not be the major consideration, especially at an elite university. Up to now, this principle has usually been followed. From some source or another, the Federal Government, the State, corporations or private donors, financial aid needs are met. As mentioned earlier, government sources

promise little relief due to threatened cuts. At Caltech now, corporate support is not too widespread. For engineers, there is the General Motors Scholarship. For chemical engineers, there is the Kodak Scholarship. For nearly everyone else, including those studying mathematics and physics, there is little corporate support. Caltech gives a prize scholarship, but there are only 25 for the whole undergraduate class. Also, they are non-renewable. It seems that increased corporate support, if feasible should be sought.

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ANNAPURNA MOUNTED

On Wednesday, April 15 at 8:00 pm in Baxter Lecture Hall, Dr. Arlene Blum will present a slide show lecture of the American Women's Expedition to Annapurna I, the world's tenth highest mountain. The expedition, led by Dr. Blum in 1978, was the first Himalayan expedition to be planned and carried out by American women and set a world altitude record for women. The lecture is sponsored by The Caltech Y and The Organization for Women at Caltech.

Dr. Blum, currently an associate chemist at U.C. Berkeley, graduated from Reed College and received her PhD in Biophysical Chemistry from the University of California at Berkeley. Her major research has been in the area of hazardous chemicals and she was also instrumental in identifying "tris", the mutagen now banned from use in children's sleepwear.

However, for the past fifteen years, Dr. Blum's life has been balanced between scientific interests and a love of climbing. She has made expeditions to Mt. Hood in Oregon, Popocatepetl in Mexico, organized an all-women expedi-

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ON PAGE 6

Delbrück Services

Funeral services for Max Delbrück will be held 4:00 pm., Sunday, April 19, 1981 (Easter Sunday). They will be held in Dabney Lounge and Gardens. Professor Seymour Benzer will give a talk, as will Gunther Stent of UC Berkeley and Jim Watson, one of those who discovered the structure of DNA.

EDITORIALS (and other such lies)

It has been said that the progress of civilization can be described as three steps forward for every two steps back. Perhaps after all of the "progress" of the sixties and seventies, our society is now taking the two steps back. Events in the recent months have shown that people are all too willing to "do things the old way." From what we know from history, we might wonder if we have really learned anything from our experiences.

For example, after the Vietnam War, Americans "discovered" that violence did not solve problems. Now people think differently. John Hinckley thought that violence would solve his problems, and so he tried to kill the President of the United States. President Reagan also seems to think that violence would solve El Salvador's problems. That's why he is sending "advisors" and weapons to this country. Soon, he may also help out poor students by giving them free, all expense paid vacations to this wonderful little country.

Yes, we of the younger generation may soon get a chance to live in the "good old days." We can learn, as others before us learned, the art of dodging drafts or bullets. Higher education can again become a pastime afforded only by the rich, and the status quo of the 1950's can reemerge. Then again, look at the bright side of this regression. At least those of us presently on financial aid will have more time for other activities in the upcoming years in such schools as UCLA, UC Berkeley, New York City College or the University of Miami. We might even have enough time to start protest movements to correct society's injustices and/or to start teach-ins on El Salvador. Yes then when we are in our fifties or sixties, we too can look back at our college years and say "Too bad things aren't like they were in the good old days..."

-Roger Fong

THE CALTECH Y FLY-BY

Today, Friday April 10, The Caltech Y, in conjunction with Le BoBo Productions, brings to you The Sharps for a rockabilly Noon Concert. That's right, once again the Friday lunch-hour will be alive with the sound of musak. So why not come outside and listen to the tunes. It sure beats listening to the guy next to you at lunch who's frothing at the mouth about the latest IBM computer. Le BoBo promises a fantastic show, and remember, its live, not Memorex. At noon on the Quad.

Wednesday, April 15, is UPDATE NOON DISCUSSION DAY. Now I know there are people who'll want to see this one. Today's guest speaker will be Dr. Gary Lorden, Professor of Mathematics. Dr. Lorden will discuss the potentially lucrative topic of "Sequential Analysis: A Gamesman-like Approach to Statistics." As always, at, noon in Clubroom I. Feel free to bring your lunch. So take a chance and show up for the talk.

Wednesday, April 15, The Caltech Y is proud to present AN EVENING SPOTLIGHT PRESENTATION at 8:00pm in Baxter Auditorium. Tonight's program, entitled "1978 Ascent of Annapurna", will be hosted by Arlene Blum, expedition leader of this exciting and unexpectedly tragic all-women mountaineering team. This is one program any adventurous outdoorsman should not miss. So come tonight and hear a first hand account of this magnificent accomplishment. Once again, at 8:00 p.m. Baxter.

Friday, April 17, another NOON CONCERT day. Today, The Caltech Y and Lee BoBo Productions are proud to present HiFi, hard-core rock-and-rollers. Bring your lunch and kids on out, and enjoy the show. Noon on the Quad.



To the Editors:

The anti-gun-control letter (issue of April 3) certainly has given me food for thought. I propose an alternate scenario as follows:

As Hinckley fires the first shot, Hinckley goes down in a hail of bullets fired by "concerned, well-informed citizens" who like to play with guns. Other "concerned, well-informed citizens" see these people shooting Hinckley and shoot down those who are shooting Hinckley. This process continues.

The results of such actions might be beneficial. Such events would leave this country depleted of NRA members and other similar gun-toting fanatics.

-Gary Mockli

Disco

From one

theatre series, a classical music series). These series should be announced some time late in the term and should have substantial discounts for students.

If you have any questions about discounts, ticket availability, or scheduled events, call the ticket office at ext. 4652.

-R. D. Lang

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NEXT WEEK: **The Pink Panther**

Mission: Abort?

To the Editors:

Upon learning of Dwayne David's undoubtedly pathetic attempt to justify abortion, I felt it necessary to respond. Every day, hundreds of innocent little babies, their full productive lives ahead of them, are mercilessly and ruthlessly slaughtered with the blessing of moral degenerates like yourself, Dwayne. Think of it—the future Einstein, Feynman or Reagan of our country legally murdered! If a woman is going to take the responsibility of getting pregnant, she should take the responsibility of bearing the child. You've heard the saying, "There ain't no such thing as a free lunch"? Well, there ain't no such thing as a free anything else either. It's about time American women showed some responsibility. I've heard all the dry old arguments by your ilk about unwanted pregnancies, *et cetera*. Well, there are many methods of birth control which are safe, moral and legal. The most effective one is abstinence. The next most effective is looking like you, Dwayne, but since most women are not surrounded by little D. D. clones, there are alternatives like the Pill and the IUD. If a woman goes ahead and gets pregnant, however, she should be prepared to bear the child. I suppose we could make a few exceptions, like your mother when she conceived you, and other circumstances of an extenuating nature, but you disgusting perverts are talking about clinics on every street corner, where a woman can run in and get her D&C or whatnot while she does the morning shopping. Why don't you call it what it really is, Dwayne, not an "abortion clinic" but "murder parlor"? You make me sick.

-R. D. Lang

Bob, you backwoods jerk,

I'm sure you're going to go on about the cruelty of "maming unborn children" as you self-righteous hypocrites put it, but shouldn't we consider how cruel it is to bear a child in a dirty, hungry, rot-infested Ghetto? Sure, the wealthy, well educated class will find a way to avoid pregnancy (Surgery, birth control) but the poorer, uneducated often learn the facts too late to prevent it. Many of these women don't need or want children and are hardly prepared to rear them. But you, "the moral majority" condemn them and their families to a life of poverty simply because they are poor. Oh yes, and the welfare roles you 19th century conservatives are always whining about are increasingly inflated by these unwanted children.

Isn't it time we allowed men and women to decide what to do with their own bodies and lifes? Or should we retrace our steps back to the days of ignorance and abuse for the poor you're so fond of. That's really the question. I suppose your answer is the ever popular idea of abstinence: "If you can't afford kids, don't have sex." Only you should be so lucky.

-Dwayne David

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Body shop

"It doesn't matter what I eat today because I'm going on diet tomorrow."

"Since I hardly ate anything yesterday, I can eat all I want today."

"It's not really possible to diet at a party or a restaurant."

These are only a few of the things people tell themselves when they are having problems with their eating habits.

While it varies from person to person, a large percentage of the population is, to some extent, overweight. The reasons why people are overweight are numerous. Some people get their only enjoyment out of life from eating. For some, food can get equated with "love" Grandma being deeply hurt when someone didn't eat *everything*, although they were stuffed already). Others, by eating foods which are naturally preferred (sweets, etc.) but high in calories, develop a

craving for these foods.

Whatever the cause, and there are many, the bottom line (to put it in Caltech terms) is: Overweight = Too many calories.

So now that you have this handy-dandy formula, what can you do? First of all, realize that there are no miracle cures (such as diet pills). While many people want to permanently weigh less without changing their eating habits—*It cannot be done*. While strenuous exercise can help, formula #2 reads: Weight loss = Eating Fewer Calories.

In order to begin reducing your caloric intake, here are a few tips:

1. Weigh yourself (about once a week); it is essential that you know how you're doing.

2. Learn approximate caloric values of most foods, by getting a booklet; you can't reduce your intake without

knowing what's high in calories, and what is not.

3. Write down what you eat before you eat it; it's important to consciously think about what you're going to eat.

4. When you notice that you eat a high-calorie food often, find something you enjoy that's low in calories, which you can eat in place of the high-calorie food. It's important to have the low-calorie food available, and the high-calorie food unavailable (throw it out).

While you may find these hints to be helpful, losing weight is usually difficult to accomplish by oneself. There are a number of different programs available. If you happen to be highly-motivated and willing to permanently reduce your caloric intake in order to lose weight, you might consider getting in touch with one of the following programs:

Overeaters Anonymous (OA) 657-6252
Take Off Pounds Sensibly (TOPS) 333-0653
Caltech Health Center (ask for John) 356-6393.

—John Adler, M.A.
Health Center 1-8

Mind shop

Well, spring has sprung, and we all can finally take joy in the blossoming concrete and the pretty birdies twittering on the telephone lines. Besides a whole new set of studies, this season of life brings with it those wonderful, cute, romantic crushes that, after ten years of abject reality, we all learn to laugh about. To pay tribute to those palpitating little hearts out there, *The Mind Shop* will provide you all with some valuable tips and techniques designed to totally rape your mental well-being over and obliterate your spirits.

The first thing you need for an eventful third term is an object of your cathexis, so keep the ol' eyes open for that special woman (or man, for you gals and homos) to fix all your attention on. The term is still young, and the work load still light, so we recommend that you spend most of your waking hours imagining how nice a steady relationship with that someone would be. This is not as easy as it sounds; one has to really work at focusing one's thoughts, in lecture and out, on this potential nirvana that beckons from afar. After all, in order to successfully mindf--- yourself, you have to stir up a whole lot of emotional energy. For optimal effect, one should invest a good two weeks in this stage (be sure to do only the bare minimum of school work, lest you set yourself up for scholastic success).

Gradually you should work into stage two, the observation stage. To successfully complete this part, you should go out of your way to catch sight of your throb on every possible occa-

sion. Instead of doing homework, go for long walks that invariably end up at the haunts of your beloved. This is not a time for action—you are there to moon only and thereby flood your mind with hope-filled delusions. The art here is to try to cling to some self-respect when you do this. *Do not* be honest with yourself. Make up good sound reasons for why you always end up in the same place once you've left your room. A good rationalization goes a long way toward fostering a sense of magic each time you lay eyes on your object. By this time, your imagination should have such momentum, that you routinely embrace your pillows and *believe* success is around the corner as you nod off to sleep late at night (preferably after your honey's room light has gone off).

After a good three weeks of foreplay, you are now ready for action. Be obviously (if not embarrassingly) forward, but convince yourself that you are being ambiguous. If all goes correctly, the person will be uninterested in any meaningful relationship, and you can droop slowly away. The key to an efficient mind rape lies in pretending that exchange did not happen. Work hard at believing things will be great as soon as that someone realizes your inner value, and it is essential that you continue the observation stage indefinitely. By this time midterms should be rolling in. Enjoy.

Next Week: "Don't take that leave yet!"

—the Agonist



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International Education Services
Shin Taiso Bldg.
10-7, Dogenzaka 2-chome
Shibuya-ku
Tokyo 150
Japan

Instructors employed by IES will teach Japanese adults English as a second language and the terminology. No Japanese language is required for classroom instruction. Teaching experience is not required. An orientation and training are given in Tokyo.

Information on salary, transportation, and housing can be obtained by providing International Education Services with a detailed resume and a letter indicating an interest in the position.

Personal interviews will be held in San Francisco and Los Angeles in April to May, 1981. Selected applicants would be expected to arrive in Tokyo from June through November, 1981.

The Diary

March 13, 1981—An unusual thing happened today. Of all people, *he* asked me out to lunch. The nerve—I think he's repulsive. So I told him about Chris and he went away, but I saw him on the way to the library, and then again on the way to work, both times looking pretty spaced. I wonder if he's doing this on purpose.

March 23, 1981—Again today he asked me, and again I had to turn him down; but it's getting hard. Even creeps are hard to turn down when they're so persistent. I hope he'll stop bothering me; I don't like to keep repeating the same lines over and over.

"I'm already seeing someone," it's such a vague dry line. I wanted to say "Fuck off, creep," the first time, but now it just seems so hard to say. And he still hangs around me, expectantly. What do I do now?

March 30, 1981—Today passed by with only six sightings of him. He says hello each time, and I reply, but I don't want to show as if I'm interested or something. One last note: Just before going to bed, I saw him standing there, outside in the courtyard, looking all forlorn. That made me pretty ill; it's just

so corny.

April 6, 1981—He appears to be increasing his attentions to me, but I think I've found a way to defuse him. I walked hand in hand with Chris all day. I'm sure he saw me at least twice. He seemed jittery and on one occasion, even walked over, as if to say a word or two, but then when I glanced over, he turned away.

April 8, 1981—So today, I hung around Chris all day, and it kept him away like a charm. I feel like I'm being watched constantly. Around dinner, he came by my room while I was across the hall. I saw him walk up, and pause, considering whether or not to knock, and when he'd gotten up the gump-tion, tapped lightly three times, trying to appear as cool as possible. When there was no reply, he shrugged his shoulders, gave a long sigh and walked away. Oh, brother.

April 11, 1981—Today was the first day, since it began, that I did not see him. Perhaps I'll think of him now and then, but it wasn't real and any vision of him goes away. Anyway, Chris and I are going to the beach tomorrow and...

SPORTS

Jouer au Track

By Track Jones

The Caltech Track team competed in a three-way meet over the weekend, losing to Pomona-Pitzer 92-32, but defeating Whittier 71-35. According to Coach Leroy Neal, the team "looked rather dead and not very sharp after the term break." However, there were several good marks.

Pauker and Fossgreen took a fifth and sixth in the shot-put, respectively. Pauker set a personal record with 32'8 1/4", while Fossgreen followed with

28'6". In the discus, Fossgreen and Pauker exchanged places. Fossgreen took third place with a toss of 77'8", and Pauker was close behind in fourth place with 74'1". Striking again in the javelin event, Fossgreen took third with a throw of 119'8", and Pauker took a fifth this time with 109'8".

In the high jump, Magee took a second place with an excellent jump of 6'3", just missing a school record of 6'5". In the hurdles, Bloom took a second in the intermediates (1:02.1) and a third in the highs (17.4).

Morrisset did well in the sprints, taking first in the 100 (11.4) and second in the 200 (24.0). Baur also took a fifth in the 200 in 25.8. Collins and Baur then teamed up in the 400. Collins took first place in 52.1, and Baur took sixth in 58.7.

The 800 was dominated by Caltech. Holmes took second in 2:02.9, with Field right behind in 2:04.6. Korevaar and Mayhew took fifth and sixth, with times of 2:09.9 and 2:16, respectively. Cammarata set a season best in the 1500 for Caltech for a third place in 4:12.8. Korevaar also took fifth place in this event in 4:20.8.

In the 5000, Clausing took fourth in 16:31, and Larsen took sixth in 17:54. The 400 relay team of Morrisset, Collins, Bloom and Baur took second in 45.8, and our mile relay team took third in 3:39.

Jouer a l'eau

Caltech swim season ended with an impressive finish at NCAA Division III Nationals held at Oberlin, Ohio, March 19-21. Two Techers, Chris McKinnon (So) and Steve Rogers (Fr), swam Caltech to 26th place in a field of 72 colleges.

The overall champion was Kenyon College followed closely by Johns Hopkins. In 14th spot was SCIAC conference champion, Occidental. The seven man MIT squad managed 30 points and 22nd place while Caltech amassed 21 points. Other conference schools were: Claremont 30th, 15 points; Whittier 31st, 11 points and Pomona-Pitzer 33rd, 7 points.

Scoring all of Caltech's points and winning All American honors was Chris McKinnon. McKinnon placed 7th in the 200 yard individual medley with a time of 1:57.79, 4th in the 400 yard individual medley with a time of 4:10.39 and 10th place in the 200 yard breaststroke with a time of 2:11.86. Scoring goes to 12 place. Steve Rogers qualified in the 200 yard freestyle and placed 24th with a time of 1:46.46. Second year coach, Clint Dodd reports "that everything went according to plan and that both swimmers did excellent swims."

Last year Chris was the first swimmer to represent Caltech at the NCAA championship since 1968 when Henry DeVitt placed 2nd in the 50 and 100 yard freestyle. This year Steve Roger added some needed depth and should continue to improve. Other swimmer who narrowly missed the time standards were Arley Anderson (Jr), Bjorn Matthias (So), Dave Huff (So) and Brent Stuart (So).

Jouer au Tennis

By Tennis Jones

Last Tuesday, the Caltech Tennis team was handily defeated by Claremont-Mudd. Although the team lost every match, many sets were very close. Morison started off in first position for Caltech, losing 6-1, 6-2. Wingreen and Thomason followed, losing 6-4, 6-2, and 6-4, 6-0, respectively. Mousmoules then lost an extremely close match, 7-5, 7-5. Lutz was next, los-

ing 6-3, 6-3. In the last singles position, Glassmoyer lost another close match, 6-7, 6-4, 7-6.

In doubles competition, Wingreen and Rodriguez barely lost their match 7-6, 7-5. Morison and Mousmoules then lost 6-1, 6-2, and Lutz and Thomason were defeated 6-0, 6-2.

Tall Women Needed

Interested in playing on a girl's basketball team? A team is being organized for next year, but we need support for it. Anyone interested in participating (you don't need to play well) contact Lucy France (Lloyd) or Barb Turpin (Ricketts) so we can add your name to a petition. This includes grad women.

Entertainment Nighthawks Probed

Nighthawks is a suspense-filled story of professional terrorists. Billy Dee Williams and Sylvester Stallone receive top billing, but the real star is Rutger Hauer, who portrays Wulfgar, an international terrorist.

Nighthawks is Hauer's American film debut, and his fine performance makes it clear why he is so popular in his native country, the Netherlands. Hauer's incisive acting draws out empathy, if not sympathy, for the professional terrorist. We want to probe Wulfgar's mind. Why does he kill? On what code of behavior are his actions based? What makes him tick?

The tense, frantically-paced life of the terrorist is reflected in the action and location of the film. We follow Wulfgar through Europe and New York. We experience a kaleidoscope of images as we follow him into a church, a foundry, disco, subway, and United Nations reception.

But, we are not the only ones following Wulfgar. Sergeants Fox and Da Silva of the New York police department, played by Williams and Stallone, are hot on Wulfgar's trail. Excitement builds as the film unfolds. Can Da Silva and Fox stop Wulfgar or will he stop them?

—Lisa Grenier

Balalaikas

get through them and even make them interesting. His monologue in the hammy folk tale showed sound ability as an actor.

The Odessa Balalaikas have an intriguing origin. Most of them were originally students at UCLA when someone bequeathed money for an ethnomusicology class in Russian folk songs. They joined, and continued playing afterwards. Things snowballed until six years ago when they became full-time musicians. Later, they were joined by two Russian emigres, one as a member, and one as their chief composer and arranger. The group has nothing to do with Odessa; the

name was chosen because it was "euphonious" and Russian.

Overall, this was the most enjoyable event I have seen on campus this year. Even the only problem of the night was well handled: the pianist's ancient music refused to fold correctly, and she resorted to slapping the paper back into place in time to the music like another unusual musical instrument.

Looking forward, for those of you who like different families of stringed instruments, the guitar-playing Romeros will be playing in Beckman Auditorium soon.

—Lee Sunderlin

C O L L E C T O R S I T E M

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C O L L E C T O R S I T E M

Bike Lane

Billie und Ich

For some time, Stephan had wanted—or, at least, thought he wanted—a ten-speed bike.” *The Man Who Rode His 10-Speed Bicycle to the Moon*, Bernard Fischman

Since the beginning of this term, three of our friends had come up to us inquiring on buying bicycles. Since they are all pretty ordinary people, if you ignore the fact that two are certified runners, we thought there may be more people out there in the same position. Therefore we will give some hints on selecting a new bike this week.

The most important thing one should remember in selecting a bicycle is that it is basically two wheels and a frame. This means that you should try to find the best wheels and frame you can buy, i.e., you can afford. Judging wheels is not very difficult. The criteria is weight and strength. This usually means you should look for alloy rims and in some cases, narrower rim/tire wheels. The weight of tires and

rims will have more effect on the way the bike will perform than the overall weight due to its effect on the angular momentum. An old rule of thumb says, “a pound off the wheels is like two pounds off the frame.”

While the quality of the spokes found on commercial bikes is relatively standard, the hubs may cause some concern. Although the size of the flange probably will not matter to most people, you should check to see that the body of the hub is in one piece. Some cheap hubs have the flanges as separate parts of the hub.

By the way, some old Fuji S-10S (not S-12S) came with sealed bearing hubs. They look like skateboard bearings. If you find a bike equipped with these hubs, you should consider that these hubs will require virtually no servicing and will perform as well as all but the very best hubs.

Although the frame of a bike is difficult to judge, it does hold the bike together and should be given careful con-

siderations. The important criteria for a frame would be its strength, stiffness, and weight.

The strength of a frame is very important in terms of safety and reliability. You should not have to worry about the frame falling apart or losing its alignment when going over rough pavement. This will mean that the workmanship of the joints should be flawless. Also, for most bikes Techers would be interested in, the joints should have lugs or reinforcements.

The stiffness is important for a good acceleration and handling qualities. When you are pedalling, you inevitably flex the frame. The amount of this flexing will determine how much energy the frame is wasting and also in how straight you can go.

The differing characteristics of a bike frame are mainly the result of its geometry and tubing material. The main things to remember are:

- 1) Shorter the wheelbase, stiffer it will be.
- 2) Longer the wheelbase, more stable it will be.
- 3) Chrome Molybdenum tubing will be lighter and stiffer than steel tubing.
- 4) Double Butting will help lighten the frame and distribute the stress better.

When choosing a bike, a pound or two of less weight should not influence your decision. You yourself probably will lose about five pounds with a long day of hard riding.

Now one may ask, “What about the components?” Well, we really do not think some of the better components used to “dress up” some bikes really make a difference to most of us. It should be remembered that the selection of components is basically a matter of taste. Some people will demand a \$15 derailleur on a \$800 custom bike when a \$30 model is standard for a \$350 bike. You should also remember that individual components can be replaced with better ones a lot easier than frames or wheels.

(to be continued)

Clocks in the Brain

Felix Strumwasser, Professor of Biology at Caltech, will give the next Earnest C. Watson Lecture entitled “24 Hour Clocks in the Brain” in Beckman Auditorium, on Wednesday, April 22, at 8 pm. Dr. Strumwasser will discuss the electrical and chemical signals that pass through nerve cells to control such functions as sleeping and eating. Admission: free.

Quackers

The race for the 1/2-keg of beer that was awarded for returning TQFR surveys was very close. Fleming, with a 66% response rate, edged out Ricketts, which returned 65% of their surveys. Ruddock took third with 44%, followed by Page with 42%. Next was Dabney with 30%, Lloyd with 24%, and Blacker with 17%.

Thanks everyone for your support with a good response rate. This year's TQFR should be a very respectable and useful publication.

If anyone is interested in working on the TQFR, please contact me, John Quackenbush, or anyone on the EPC. We need lots of people and ideas if we're to keep producing a useful TQFR.

Thanks Again
—John Quackenbush

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Auditions are being held next week for the Caltech Drama Dept. production of “The Fatal French Denial” written by Caltech's master playwright, Oscar Wilde. Auditions will be in Clubroom I on Wednesday, April 15 and Clubroom II on Thursday, April 16 from 8 to 10 pm. Anyone interested is invited to try out.

Buying or selling something? You, too, can take out an ad in The California Tech! The cost is \$2 per inch plus 30¢ per extra line for Classifieds. Bring ad copy to the Tech office or call 356-6154. OK?

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Easy Rider

by J. Random Rider

Cycling has got to be life's greatest pleasure. What other activity gives you exercise, transportation and enjoyment all at the same time? Running, for example, is a great exercise, but you get all the smog you're creating that will destroy trees and animals and get all the windows dirty and make you cough! Do you really want to do that? With a bike, the only pollution you make is the stuff that goes down the toilet and it's biodegradable so it won't hurt you. If everybody rode a bike instead of driving a car, there would hardly be any smog and you'd be able to

breathe normally and the plants and animals wouldn't die and life would be perfect. Think about that the next time you drive to the Pantry.

I remember getting my first tricycle. What a thrill it was. I was two when my mommy and daddy got me my trike. I sat down on that beauty with its laid back handlebars and took off down the driveway. I made it down and back and only fell once. I was so proud. I later moved up to a larger model with a rear step for passengers. Finally, a few years later, I got a bicycle. All the big kids had bicycles and I sure wanted to be a big kid. I got one of those convertible kinds that you can make into a boy's or a girl's bike. That was O.K. for a while, but I gradually realized that my convertible bike just was not up to par with a bike with a sissy bar and banana seat. I got one of those and boy, was it great! You could go over jumps and down dirt paths. Overall, it was much

better than my old bike. Finally, I outgrew even this phase and saw that I wanted—no, needed; had to have or I'd die—a ten speed bike. I got a Schwinn Varsity, a relatively heavy clunker, but who cares as long as it's got ten speeds. I hardly ever rode it since I could get my mom to take me wherever I needed to go in the car, and that was a lot easier. You can't ride a ten-speed on trails because its tires are too skinny and you'll fall down so what good is it? Well, eventually I saw the light and got a more expensive bike and all the proper biking gear. "What does

all this have to do with anything?" you're probably wondering right now. I just thought I'd tell you all about my experiences with bicycles so you could see how really wonderful they are. With two legs, two arms, a body, a bike, a helmet, toe clips, a water bottle, rear view mirror, cycling pants, gloves, and a road, you can do anything!

When you're on a cycle, you're in paradise. When you've been pedaling so long your legs ache like they're going to fall off and the wind has chapped your lips so bad that they're bloody, you are ex-

periencing the best that life has to offer. To the rapture of cycling is added the joy of flat tires, broken cables, and bent wheels. There is little to compare with the fun of changing a flat tire in Lacy Park in San Marino. It's really a nice place to go for a change of scenery. If you're up to a longer ride you can go to Griffith Park which is much larger.

In conclusion, I would say that riding a bicycle is the most enjoyable activity I've found, especially at Tech. In fact, it's even more fun than computerolling...breathhtaking, isn't it.

Annapurna Y Accept?

FROM ONE

By Mike Nelson

tion to Mt. McKinley, was a member of the American Bicentennial Expedition to Mt. Everest, and has made more than twenty ascents of mountains higher than 20,000 feet.

Wednesday's lecture will cover one of the most treacherous and challenging of Dr. Blum's ascents, that to Annapurna I in Nepal's Himalayas. This ascent, organized by Dr. Blum in 1976, not only marked the first time women had climbed over 8000 meters of Annapurna's slope, but also the first time women

continued on page 8

The Caltech Y is once again accepting applications for the Paul Studenski Memorial Award. The \$1800 award was set up by the parents of Paul Studenski to give a Caltech student a very special opportunity for travel and introspection.

Paul Studenski graduated in 1972 after five years at Caltech with both a BS and an MS in electrical engineering. Not quite sure where he was headed, Paul and his girlfriend, Jean, took some time out to travel, relax, and think. After graduation the two of them toured Europe and the U.S., looking, listening, and learn-

ing. By mid-summer of 1973, Jean was an important part of his plan for the future. In August, on their way through Kansas, Jean and Paul were killed when a truck ran into their Volkswagen.

The Studenski award was set up so that other students could get a chance to travel. If you've considered taking a break to travel and think, you might apply for the Paul Studenski Memorial Award. Just write up a brief description (about one page) of your plans and drop them by the Y office before Friday, April 17. The winner will be notified by May 4.

COLEMAN Auditions

The 35th annual Coleman Chamber Auditions will be held April 24, 25, and 26 in Ramo Auditorium.

There are three audition categories, and all three competitions are open to the public without charge. Junior groups will audition on Friday, April 24 at 4:00 pm.; intermediate ensembles will audition on Friday at 7:00 pm.; and eighteen senior ensembles, representing major music institutions all over the United States, will begin auditioning at noon on Saturday, April 25.

Any chamber ensemble is

eligible to apply for the Coleman Auditions. This year's competition will include string quartets, piano trios, brass quintets, and woodwind ensembles.

Six winners from the audition competitions will be presented in concert in Ramo Auditorium on Sunday, April 26 at 3:30 pm. Awards of \$5500 will be conferred. General admission and student tickets for the Sunday concert are now available at the Caltech Ticket Office and by charge phone at x4652.

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PRINCE CHARLES of the SRITHII

By James Host

Episode 6: Prince Charles and the Purple Knight

Throwing his sword with uncanny aim, he pierced the shiny armor of his fearsome foe at the joint of the knee. Swearing mightily, the Purple Knight wrenched the barbarian weapon from himself; his advantage, and thus the battle, was lost to him.

Steeling himself, tottering on his good leg while bleeding profusely from the other, he let fly a last curse at Prince Charles, "Your mother!!" He convulsed briefly upon the ground in proper dramatic fashion, then expired.

Wiping his sword upon the clothing of his enemy then sheathing it, Prince Charles placed his foot upon the neck of the dear deceased and, turning his face to the moon, gave voice to one of the most hideous cries ever to be imagined by the mind of man. The blood-curdling shriek of victory and savage elation and remarkable bloodlust and fury and joy and God alone knows what else carried for miles, causing priests to cross themselves and to mutter prayers that they be spared the horrors of the Beast this night. Children, hearing the awesome victory scream, cried out in their sleep, then resumed dreaming, only to have nightmares of bloody headless axe-murderers chasing them inexorably. Brides clutched their new husbands tighter and begged protection. Bridegrooms clutched their new wives tighter and begged for [sorry folks, this is a G-rated epic—*The Royal Censor*]. Somewhere in a zoo, wild animals, hearing the cry, knew that one of their own had made a kill that night, and, in their own fashion, echoed the cry with sullen growls.

Up on the moon itself, where the victory shriek had been directed, several Selenites had a strong psychic vision. Being a stoic race, these sensitives quickly forgot about the event. Flexing their long metal tentacles, the Selenites went back to their useless ore mining, for they were all of them quite loony.

Beyond the stars some incomprehensible aliens had the scene of the battle on focus in their telectroaudioscope viewer-speaker-feeler screen with constant static discharge. Suddenly, the shriek. The aliens did not, of course, comprehend.

Shraking with glee, Prince Charles ripped the armor plate from his erstwhile antagonist. Tearing out the still beating heart, a grin of wild abandon appeared upon the finely carved features of the Angleterran

noble. Peeling off great strips of flesh with his china-white teeth, the prince quickly consumed that organ of life. Satisfied, he drew his wrist across bloody lips, then wiped his greasy fingers upon heavily muscled thighs. Easily he loped into the forest, and climbed with great agility a giant tree which had undoubtedly stood for many centuries. Prince Charles knew this because a date many decades past was carved into the mighty trunk along with a pair of initials. Selecting a high, flattish branch, he quickly fell asleep. Below, foxes prowled, making the ground in this region too dangerous to rest upon any length of time.

Next week: Prince Charles fights the killer foxes!

Italian Itinerary

"Florence and Italy's Hill Towns," a travel film personally narrated by Robin Williams, will be presented on the More Armchair Adventures series in Caltech's Beckman Auditorium on Wednesday, April 15 at 8:00 pm.

Williams will relate his voyages to the hill towns above the Adriatic where Michelangelo was born, viewing some original sculptures by the young Michelangelo which are displayed on the Casa Buonarrotti. The sculptor's last Pieta, created for his own

tomb when he was 80 years old, will be observed. Other hill towns—Sorrano, Cerveteri, San Gimignano—known for their ancient tombs, tunnels, and towers will also be featured. The film catches a glimpse of village dancers in the piazza, and the ritual of Florentines enjoying their mid-morning snack of garlic toast. Mario's gold market, where rings and ornaments are made, and the leather school in the church of Santa Croce, where poor boys are taught a trade, are visited; viewers watch an ancient Greek ball game played on Piazza Santa Croce by players in renaissance costume.

A shopping tour of the Italian cities includes a visit to Pucci's silk works, where young girls spend five years learning the trade from their mothers, and to Ponte Vec-

chio, the oldest shopping center in the world over a river.

Williams, born in London, England, was reared in California and was a principle member of the Laguna Playhouse while a student at Orange Coast College. He served as director of international tours for two separate world travel agencies, and then returned to the study of cinematography at the Brooks Institute of Photography in Santa Barbara. Williams has been accorded recognition by National Geographic Society, the Carnegie Institute of Pittsburgh, and producers of major TV series in Chicago, Cleveland and Detroit.

Tickets are now available for the Williams film at the Caltech Ticket Office. The entire narration for this event will be interpreted for the hearing impaired.

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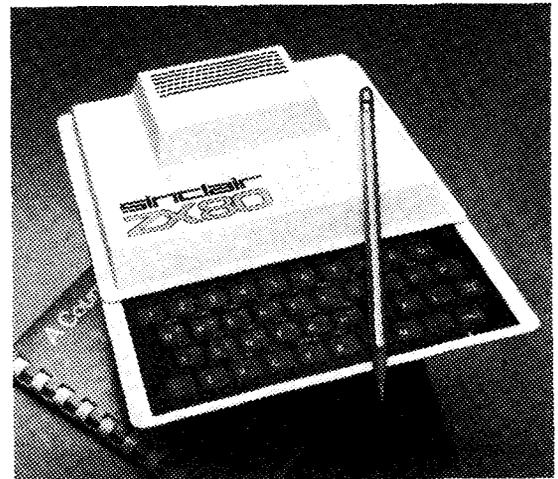
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 * **stuff that didn't fit anywh** *

Merit Awards

This year there are two series of Merit Awards available to Caltech freshmen, sophomores, and juniors who will be Caltech students in 1981-82. Awards will be based on merit (no need-base component), including GPA, recommendations, and research accomplishments. Applications will be available Wednesday, April 8, 1981, from Carmen Longo, Dabney 106, and they will be due Monday April 20, 1981. The awards are provided by the Carnation and Prize Funds and can be as much as \$3,000 each. Approximately 25 awards will be made, primarily to sophomores and juniors.

Coleman Winners Concert

The winners of the annual auditions of the Coleman Chamber Music Association will perform in Ramo Auditorium on Sunday, April 26, at 3:30 pm. Six major awards will be offered to ensembles of young musicians in this nation-wide competition. Admission \$4.00; students \$2.00.

GSU Tonight

There will be a meeting of the Gay Student's Union, tonight, April 10, at 9:30 pm in room 218 Baxter.

Menneken Fellowship

Announcing the Carl E. Menneken Fellowship for Scientific Research, 1981-82 academic year. The dual objective of the \$1,200 Menneken Fellowship is: 1) To further the progress of engineering and science in areas of importance to the Navy; 2) To provide aid to a worthy doctoral student who is involved in a research program the fruits of which are expected to benefit the Navy. Deadline date: 22 May 1981. For further information please contact the Placement Office, Room 8, Dabney Hall.

Party for Grad Students!

All graduate students are cordially invited to a party to be held in their honor today, starting at 4:30 pm., between Dabney Hall and Gates. Beer, wine, munchies, etc. will be provided. This event is brought to you courtesy of the GSC.

SENIORS!

If you are sure you will graduate this year (no matter what that silly old registrar says) and want your picture in the *Big T*, send in a 3 1/2 x 5 black and white photo by May 1, 1981, to the *Big T* desk of the Student Publications Office, 107-51 (107 Winnett, if you deliver it in person).

IBM Is Coming!

Representatives from IBM Corporation will be on campus Thursday, April 30, 1981 to interview students in: BS, MS/EE, ME, ChE, CS, Ma. If you are interested in making an appointment, please contact the Placement Office, Room 8, Dabney Hall. At least Permanent Visa required.

Anti-Static Discussion

Nancy Monk, participating artist in "Anti-Static" Exhibition, will be in the Gallery Tuesday, April 14, at noon, to informally discuss her work. Nancy lives in Pasadena, and works with paint, clay, and handblown glass. All are invited; bring a lunch.

Annapurna

FROM SIX

had reached Annapurna's peak at 26,540 feet. Requiring two years of preparation and fundraising, the climb was a battle not only against the mountain's treacherous terrain but also against the women's personal doubts and ambitions. A full account of the expedition is also retold by Dr. Blum in her book, *Annapurna - A Women's Place*.

FROM ONE
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TBP

The Tau Beta Pi Proposal

The Corporate Scholarship Committee of Tau Beta Pi here is looking at this problem. Development, the principal money gathering element at Caltech, however, is leery of this. A member of the committee, Bill Naylor, was cautioned to "watch his step." Development's fear is that if Tau Beta Pi solicits small prizes, the corporations, their consciences eased, will decide to contribute no more. Thus, there will be a net decrease in donated funds. This assumes a sort of unwanted obligation on the part of the donor—"I gave at the office." If the support was for conscience's sake alone, then the corporations needn't (and probably wouldn't) contribute in the first place.

Why must college educations be subsidized anyhow? Can handouts be tolerated in this "free-market" economy? It provides that nothing is free—you can't get something for nothing. In reality, contribution to education is not

just a giveaway. It is necessary. Educating the American people is an investment in the future, somewhat like a research budget in an industry is. Competition, especially in high technology fields, is tremendous. If a firm relaxes its funding of research and development, it will quickly get eaten alive by others in the field. One doesn't simply put out the same product and survive. There must be constant innovation. The very same thing is true for education in America. The popular anti-intellectualism trend has taken its toll. American technology has been backsliding to a lesser position. Japanese electronics and German engine technology are considered by many to be superior to that of America. In short, educational support is an investment in the future which cannot be neglected. There must be a free market reason for funding, and this is it. [Chang is the chairman of the Tau Beta Pi corporate scholarship committee.]

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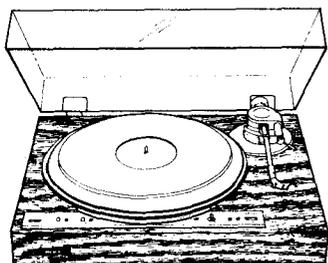
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