



Stanford Marching Band

—Photo by Behzad Sadeghi

Institute Changes Patent Agreement

by Castor Fu

This year's Caltech Catalog contains the Institute's first effort to formalize a specific policy on student-written software.

The new Student Patent and Computer Software Agreement replaces the old phrase "inventions" with an updated "inventions and computer software." There is also an important new clause added in:

2. The Institute agrees that rights of all other ... computer software made or written by me with the use of Institute facilities are to be retained by me, except for computer software written in connection with or used in the education program of the Institute, for which the Institute shall obtain an irrevocable royalty-free, non-exclusive license, with the right to grant sublicenses, for any purpose whatsoever.

The intent of this paragraph, according to Ed Ansell, Caltech's patent attorney, is to protect the Institute in situations where students make small contributions to software projects, and then decides to force the Institute to pay royalties. An example of this kind of "courseware" would be the data analysis programs used in the physics laboratories.

Lyman Bonner, the registrar, said that another consideration was also to prevent arguments over ownership such as the situation involving the program SMP, which, after over two years, is still in the courts.

Unfortunately, examination of several hypothetical situations reveals several flaws in the new agreement. As pointed out by John Beahan in a recent *Tech* article, general purpose computing facilities are extremely limited, and almost all usable computing is obtained through classes or faculty-sponsored research.

Even the house IBM PC's are under the jurisdiction of the Dean of Educational Computing and, under a broad interpretation, fall into the class of "in connection with the educational facilities of the Institute." Thus, until more popular machines than the Data General mini's become available, virtually all independent student computing can fall under paragraph 2.

Perhaps the Institute deserves to receive the copyrights on software produced by students using Institute facilities, but, on the other hand, one could just as easily argue that the Institute has rights to a book written using

campus word-processing equipment.

Although one may think this is fairly harmless, several classes here, such as CS 270, Computer Aided Design, are geared towards writing software which clearly has potential commercial value.

It would be frightening to think that the Institute would deliberately exploit the students through such classes. However, the possibility does exist.

A computer aided design package is currently distributed by UC Berkeley for a nominal fee to education institutions, and for forty thousand dollars to corporations. It seems plausible that such a package could be the foundation for a startup company, but if it faced competition from CIT, it could have serious problems.

It may be best to leave distribution policies up to the student and the Institute on a case by case basis. Furthermore, there is nothing to protect the author from any liability incurred through use of the software.

According to Mr. Ansell, such disclaimers are included on software distributed outside the Institute, but no such protection existed on software distributed internally.

Seitz Talks on Supercomputer

by Lily Wu

Charles L. Seitz will begin this year's Earnest C. Watson Lecture Series on Oct. 17 with a talk on "Concurrent Computing." Seitz is a Professor of Computer Science here at Caltech.

The talk will deal with both the technical and practical aspects of concurrent computing. The idea behind it is to have many processors working on a problem at the same time so the job would get done that much faster.

Most processors now are sequential, meaning that they work on one problem at a time. Professor Seitz has developed a concurrent processor at Caltech called the Cosmic Cube.

The Cube is comprised of 64 small computers which can

all work simultaneously on parts of a large problem. The 64 units are tied together with a communication network. This distinguishes the Cube from parallel processors, which also can deal with parts of a problem concurrently.

The separate units of a parallel processor usually do not communicate with each other, but only with some central processor. The communication network greatly increases the number of applications which the Cube can be used for.

Problems which can utilize such a "supercomputer" are usually ones involving a highly repetitive numerical process. One example is that of any problem involving differential equations.

Professor Seitz will also deal with some of the practical

aspects of concurrent computing. The Cube, for example, cost approximately \$40,000 and has the capability of 64 separate computers. It also operates between 5 and 10 times faster than a VAX 11/780 system which is a currently popular system used by scientists and engineers.

The Cube is physically small and can be expanded indefinitely in terms of extra processors. However, the Cube is probably only an indication of the supercomputers to come. It is a "scale model."

Other possibilities for further applications, and considerations for practical realizations of concurrent computing will also be discussed at the talk.

The talk begins a 8 p.m. on Wed. Oct. 17 at Caltech's Beckman Auditorium.

Goldberger On Baxter

Art Gallery Not to Reopen

by Frederic Wong

In an interview last Wednesday, Dr. Goldberger discussed the controversy that surrounds Baxter, its closing, the reasons, its future and the rumors.

The study and analysis of Baxter Art Gallery which led to the closing was triggered, according to Goldberger, when the gallery's Board of Governors suggested a fund raising effort with Caltech for a new building on campus to house the gallery and an expansion in the arts program.

Asked why Baxter would be closing, he repeated what he had said in the August issue of the *Caltech News*, that apart from lack of resources, it is the institute's policy that "activities on campus and associated with its name must have a clear, direct connection to one or more of its research, teaching, and quality-of-life aspects."

In particular, he feels that the gallery does not affect the quality of life of enough students to justify its existence. "I think the gallery was by and large a good thing and I am not unsympathetic to providing some opportunities for there to be art or general humanizing elements on the campus. It's just that I feel that the price was too high."

Goldberger states that the gallery will not reopen, not even if Caltech only has to donate or rent out the space. In fact, space donation was proposed at a meeting of the Board of Governors of Baxter.

Goldberger reasons that since the administration has adopted the position to end affiliation with Baxter, we cannot provide space "for something in which we have no involvement," and "that it would not be a good situation

for us to be in, to have an operation that uses the name of Caltech for which we would be making virtually no contribution and consequently wouldn't have any legitimate rights to have any authorities or responsibilities."

Goldberger made assurances that "we are prepared to help... in whatever way we can" to relocate the gallery, but he did not mention any concrete plans.

Goldberger thinks that the gallery "plays an important role in art in this community." But he also thinks the importance of the theory that the public perception of Caltech as being significantly enhanced by the existence of the gallery or that "Caltech appears to be a broader or more humane institution by virtue of having the gallery" has been exaggerated.

Goldberger tried to clear up some of the rumors related to the closure. Regarding the apparent secrecy of the decision and of its announcement, he admits that he made some procedural error, that he should have "spoken up sooner," that perhaps "there should have been more consultation."

He denies that there was any pressure from some faculty members to stop any increase in funding in Baxter or to close the gallery. There is no truth in the rumor, he says, that David Grether, Chairman of the H & SS division, "was not consulted... that he merely saw a carbon copy of the letter sent to the Pasadena Art Alliance. He was actively involved in the discussion that I carried on with the administration."

Goldberger further claimed that he had consulted with the chairman of Baxter's Board of Governors prior to the decision.

Caltech Chinese Club Starts Year

by Lily Wu

Last Saturday evening was the Caltech Chinese Student Association's (CCSA) new membership drive dinner. The event was well-attended and the CCSA will probably be one of the largest student clubs on campus again with 70 members this year. Activities on Saturday included dinner prepared by several graduate students, a CCSA T-shirt drive and a program of games designed to introduce new members to each other. The games were emceed by sophomore Rosie Wu.

Junior Hsiu-tung Yu, president of the club, was happy with the large showing though he was "a bit disappointed that

more undergraduates, especially new members, did not attend." The club's membership is approximately split between graduate and undergraduate students. A few faculty members including Profs. Theodore Wu, Chris Brennan and James Lee also were present.

The club is still open for membership to all Caltech students. If interested, contact the club secretary, Ting-ling Kao (x6188). Activities planned for this year include a party (with other schools' Chinese clubs), a picnic, some sporting event, and films. A Chinese library is available to members in the Dabney basement.

the gadfly

Volume 2
Number 2

An examination of student life at Caltech

Feelin' Groovy

by Dolly Wu

Hello. Upon arriving at Caltech, I headed for the housing office to find out which room they've allotted to me. The secretary refused to believe that I was a new graduate student and referred me to the undergraduate section. I probably looked (and was) confused, lost and a bit bewildered; so she mistook me for a new undergraduate and insisted that I show her some proof. Of course my "documents" were stupidly packed in the bottom of my suitcase and there was no way to get them without having my socks and underwear embarrassingly exposed. Firmly, or as firmly as possible, I told her that I was a new graduate student. There was no reason for anyone to deceive her about something like this.

Well, I finally got my room, but things did not go quite smoothly. That night, I rolled off the bed as it was much smaller than the one I'm accustomed to. The next morning, my sister, who is an undergraduate here, came by and promptly informed me that all graduate students are turkeys. So I'm a turkey.

Clearly, you can see I was off to a bad start. The entire year went rather horribly. I had to make up for deficiencies in my undergraduate education. There was homework galore, exams galore, and pressures from home. The dormitory kitchen had mobs of people, peculiar smells, and few utensils. I've never had to live with so many people before. What a shock. Most of my waking hours were spent working. Work, work, work. Caltech's new motto: The truth is—too much work.

This is now my second year at Caltech and I'm actually beginning to adapt and maybe even like it here. My sister exclaimed, "Do you REALLY?" because she thinks Caltech needs some improvements and she writes those terribly serious sounding Gadflies. They are lovely suggestions. (If I said otherwise, she may slug me or never invite me to lunch again.)

The main issue seems to be the attitude that many people at Caltech have. Many are extremely serious about one thing—their own work or field of study. Put kindly, "they are devoted to their topic." Put less kindly, "they are narrow-minded." There is nothing good or bad about it; it's just a way of life. Plenty of people rush to their offices and laboratories, and leave little time to get involved in politics, lounge on the grass, walk over to the Huntington Gardens or do anything fancy-free.

The seriousness is pervasive. Even the few humanities courses offered here deal with very serious topics. And a few professors in each department tend to dole out homework as if his was the only serious class. Membership at the Athenaeum is a serious affair. Dinner is catered intentionally to the San Marino residents who wear their serious California clothing. Ho hum or humbug.

But I did mention that I am beginning to like it here. From the previous paragraph, you wouldn't have thought so. The reason is that I no longer view the stuff I'm doing as work, but rather, as a project, a goal, an interesting subject. Am I sounding suspiciously like a Caltecher? Or have I become suspiciously adultish with their silly seriousness?

There are other things that I enjoy about Caltech. My window faces the east and it's amazing to watch the light cones appear as the sun peeks over the horizon. I don't watch the sun rise nearly as often as I like because my brains wouldn't work properly the rest of the day if I get up too early. The roses on the west side of Millikan are lovely, as are the lilac trees which line Del Mar (new students: wait until April for them to bloom). I often don't have the use of a car and resort to the not very rapid Rapid Transit system. The people I've met are usually more pleasant and more patient than, say, New Yorkers. Sometimes, I'm glad to leave behind the east coast "sophisticated" ways and ideas. However, Californians are no less interesting.

When I'm able to get a car, I pack some sandwiches, lug my thermos full of hot cocoa along, and a sweater, and head for

continued on page 4

letters

More Tolerance

To the Editor:

I was genuinely surprised this week when I encountered a little bit of nastiness that I thought this campus had outgrown. It seems that some easily offended people have taken it upon themselves to remove certain "distasteful" posters from legitimate posting areas. I don't wish to restart the controversy of two years ago, but new students should be informed (and some old students reminded) of what was decided as a result of all that brouhaha.

Two years ago, the newly formed Caltech Lesbian and Gay Society (CLAGS), in an effort to make its presence known, distributed a large number of posters and flyers on campus. Well, some people got offended and ripped down or burned many of the posters. Understandably, CLAGS objected to this vandalism. Conservative factions objected to CLAGS' objection, CLAGS' posters, and even to CLAGS' existence in general. The fly-by-night Caltech Heterosexual Society clouded the controversy with their own satirical posters and outspoken views.

After a good deal of debate by means of this publication, the campus got tired of the whole issue.

CLAGS cut down on the number of its posters (we couldn't afford to make that many for long anyway), fewer people vandalized posters, and the IHC quietly said something about the sanctity of bulletin boards.

It seems that now everyone should be happy, but I am still

dissatisfied with the situation. The only reason CLAGS posters haven't been vandalized much until recently is that CLAGS knows where not to waste posters. A poster (not necessarily CLAGS) in Fleming still won't last more than five minutes, even on the supposedly sacred bulletin board.

I feel that somebody's missing the point, so please indulge me and allow me to rant for a bit:

People have a right to communicate. Freedoms of speech and expression are guaranteed in the Constitution.

Posters cost money and time to distribute, and are important to the people who make them.

Not only is tearing down other people's posters generally uncool, but it is also a violation of the Honor System.

Caltech is one of the most intelligent communities in the world. This being true, I would expect reason and compassion to be the rule on campus. But I am continually amazed at how many Techers refuse to think about the motivations or consequences of their actions. It

seems that there are some who believe that hate and prejudice are valid reasons to ignore the rights of others.

I find this attitude difficult to accept. The questions of individual and societal rights have never been clearly resolved, but my favorite guideline is what somebody-famous-whose-name-I-forgot said: "One man's rights end where another man's nose begins." I don't care what anyone does, as long as he doesn't hurt me or my friends.

If someone has a valid complaint about CLAGS posters, he should tell his house president, or a representative of CLAGS as listed in the *little t*.

—Josh Susser
Ricketts House

More letters

can be found on

pages 4 and 5

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The Caltech Y Fly-by

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Saturday... October 13

Sailing, if you signed up and won (check at the Y office). Today is the day.

Monday... October 15

"The Strategic Defense Initiative," Dr. Gerald Yonas, principal scientific advisor for the Strategic Defense Initiative, Ramo Auditorium, 8 PM.

Wednesday... October 17

Noon Update, "Chemistry and Microphysics of Cloud water Acidification," Micheal Hoffmann, Winnett Clubroom 1, noon, bring a lunch and a friend.

Philharmonic Trip, the program consists of works by Mozart, Stravinsky, and Strauss (see above).

Friday... October 19

Noon Concert, to be announced.

Philharmonic Trip, the program includes works by Dvorak, Ligeti, and Casals (see above).

For more information contact the Caltech Y office at 356-6163, or just drop by.

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THE CALIFORNIA TECH

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letters

Better Food at Caltech?

To the Editor:

The food situation at Caltech needs improvement. We deserve better food for our board contract money than we are getting. A small, readily accessible food source would be useful, for example for quick midnight snacks. Therefore, I offer two separate but not mutually exclusive proposals to deal with the dearth of good food.

First, our food service for lunch and dinner is probably less than adequate. In my opinion, this is a symptom not of

Servomation in particular but of the structure of food service contracts in general. As it stands, the food service company has a captive "audience" for one year. Whether students like the meals or not, whether they even eat the meals or not, they have to pay for them. Thus, the food service company has only a limited incentive to provide good food caused by the annual review.

My proposal is that future food service contracts should be negotiated something like as follows. Caltech auctions the right to service Caltech for one year. Then, Caltech should issue a book of meal tickets to each student at the beginning of each term (to be handed out when students check into the

student houses or register). Students would buy what means they wanted with the tickets, one ticket per meal. Unused tickets could be redeemed by the student at the end of the term for cash. The food service company would make money by redeeming the tickets that they received for meals sold. The food service company would have to bring in more in meal tickets than the cost of the right to service Caltech plus the cost of the meals. The food service would have to provide good food because if they didn't then students would stop buying meals with the meal tickets.

I believe an arrangement along these lines could be negotiated with some food service type company. It would be preferable to the current

continued on page 5

Factual Corrections

To the Editor:

Sam Finn in his "emotionally charged" article entitled "Outrage" begins his "criticism" of my article entitled "A Dismal Shame" by stating "Like Reagan, Pitts has lost all grasp of reality when he writes '...We now enjoy the highest percentage of per capita employment ever in a peacetime economy'" and notes in support of his claim the current unemployment rate of 7.5% comparing it to past rates which have been lower.

Unfortunately, Finn's accusation rests upon a misunderstanding that per capita employment is measured by the unemployment rate. The

former is the ratio of the number of people employed to the total population and the latter is an attempted relative measure of the percentage of people either shifting jobs, seeking jobs, or "unable" to find jobs compared to the total labor force.

The fact is that we are indeed enjoying right now "...the highest percentage of per capita employment ever in a peacetime economy." However, Finn's list of unemployment figures are instructive.

As he states:

"The facts: currently unemployment [should read unemployment rate] is 7.5% When Reagan took office in 1981, unemployment was 7.6%; when Carter took office in 1977 unemployment was 7.5%;

continued on page 8

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Letters

Humanities at Caltech

To the Editor:

In my article of two weeks ago, I made several very blunt statements about the Caltech Humanities and Social Sciences Division which I did not intend to make, and the general impression the article gave was of derogatory criticism.

This was unintentional, and was due to my late-night attempt to change my usual overly pedantic writing style into something more flippant.

I feel that, because of the very small size of the Institute, it is not practical to expect the Caltech H&SS Division to present the same vast range of courses as a much larger liberal arts university, but that is still no reason to accuse the Division of being "the pits"

As Dr. Benton pointed out in his rebuttal to my article, Caltech has an excellent roster of faculty, and I would like to emphasize the extremely high quality of instruction in many H&SS courses.

This was precisely the point my previous article was trying to make, that although Caltech's H&SS division is small, and possesses some drawbacks because of that, the quality of the faculty is among the best available anywhere, and many of the courses offered are superb.

In addition, there are many professors who are willing to sponsor independent, self-defined work of almost any reasonable sort for those students who are seriously interested in learning material which is not taught in a formal course. The existence of this possibility *could* largely negate the criticism about the size of the Division.

The only major criticism I have of the Caltech H&SS program is that the constraints imposed on the students regarding the courses they may take are far too extreme. Surely it is preferable to have students take a somewhat narrow range of courses, but profit highly from them because they are interested, rather than having students learn a wide range of uninteresting (to them) material badly.

Under the current Institute policy, each student has a very narrow range of choice in the H&SS area, since only two to five of the many courses offered each term will both fit his

schedule and help satisfy his remaining course requirements, effectively removing most of the available courses from the catalog temporarily.

Of course, a student can wait a year or two to take a particular course, if he is interested in it, but if he is not planning a particular course of study in the H&SS area, he may be simply choosing his classes from whatever fits his schedule. Because of this, he may be forced by the stringent requirements to take a class which he finds much less interesting than one which also fits his schedule.

This has led to a situation where students' morale is very much depressed, since although few people mind taking required courses overmuch, no one wants to have to give up a

more interesting course for a required one.

I assume that the strict requirements were instituted to counteract the instances of students taking only a narrow range of courses in the H&SS, and that something like them are probably necessary, but could there not be an alternative?

Perhaps a student could be required to submit a list of H&SS courses he intended to take, and have that list (which could correspond to the current strictly-specified portions of a student's H&SS curriculum) approved by the H&SS division, thus insuring that each student took a sufficiently broad range of courses.

The rest of the student's H&SS courses (corresponding to the one third fraction that are currently unspecified) could be completely elective, and could be fitted in wherever schedule conflicts ruled out one of the planned courses.

—John Beahan

Gadfly

from page 2

Santa Monica beach around 5 pm when the maddening crowd has retired. I also bring my physics books to read in order to understand the projects which I'm getting very serious about. Beyond the Pacific, and beyond the clouds, the universe is immense, unimaginably immense. Immense. None of the bad things about Caltech which worry my sister can ever really matter. None of the foolish things Reagan does can ever really matter. If we blow ourselves to smithereens in nuclear war, it wouldn't matter. The universe wouldn't feel it. So for me, it's much easier to think seriously, narrowly perhaps, about only a few subjects.

Of course, for subjects to ponder, I rather choose things I enjoy dealing with. I don't enjoy being involved in politics, economics, current affairs and whatnot, even if it means an eventual improve-

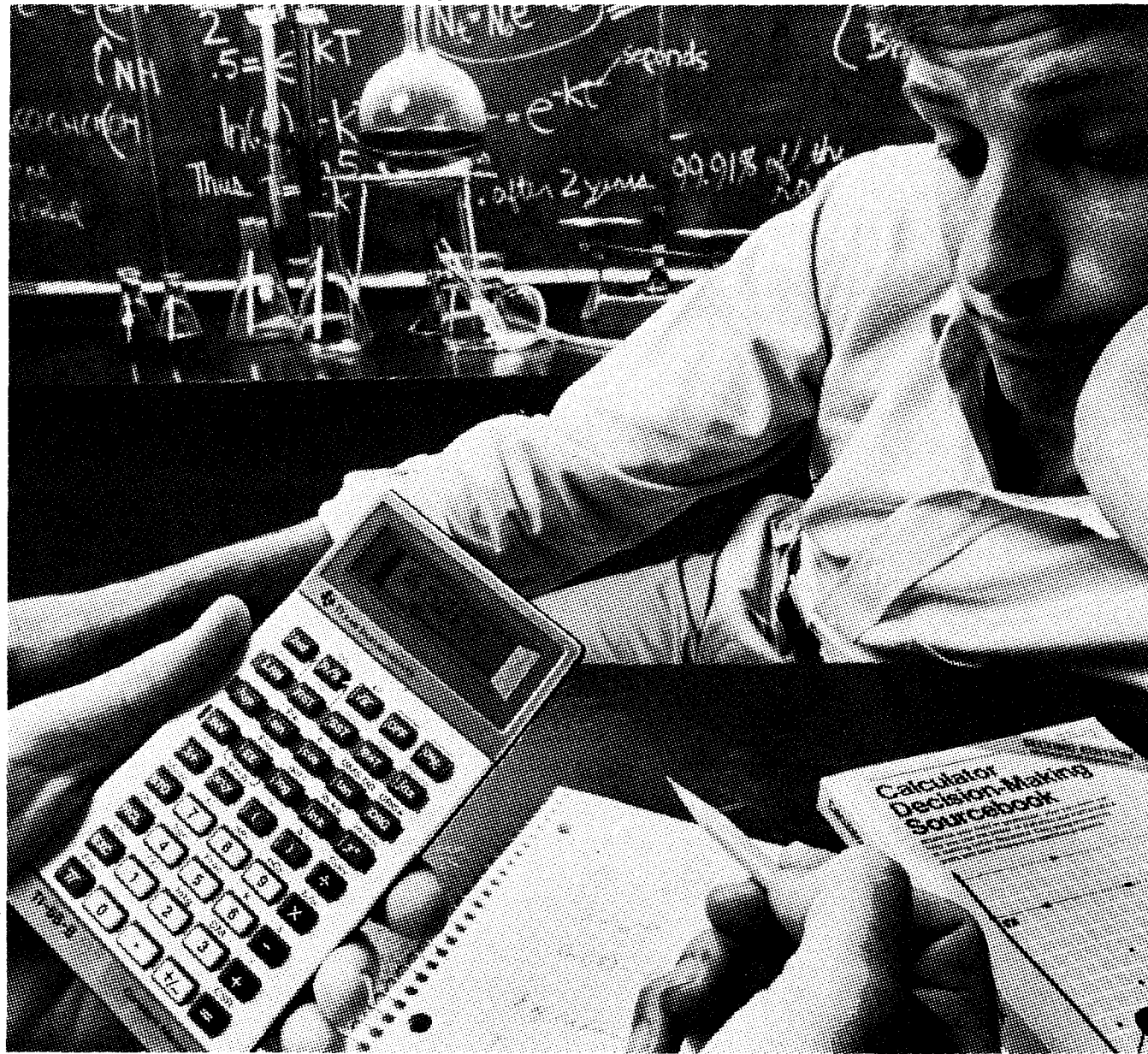
ment for people. On smaller scales, I don't enjoy dealing with, say, the administration of Caltech even if it means an eventual establishment of fairer housing regulations. This is all very self-centered, irresponsible and dishonorably adultish of me, but it is an easy way of life to choose.

Maybe I'll grow "younger" someday. But right now, I prefer munching on my sandwich, wishing I brought some watermelon along, thinking seriously about my book, feeling happy.

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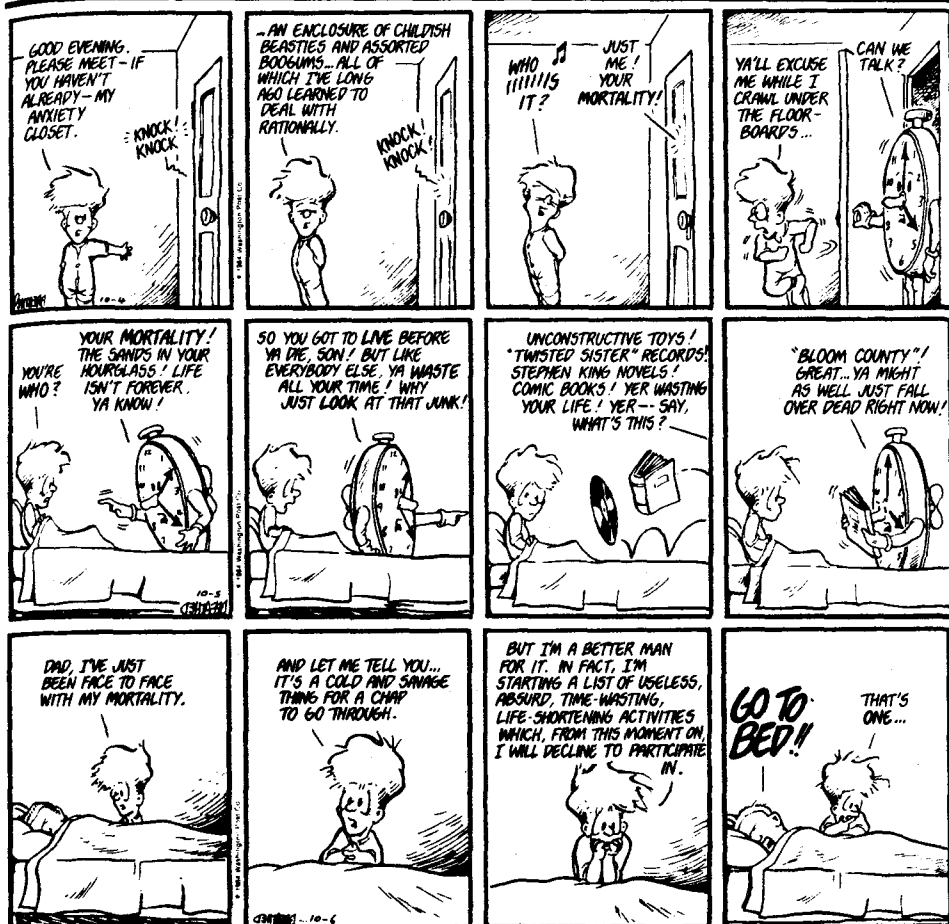
To the Editor:

I wish to correct an inaccuracy in Steve Pitts' September 21 editorial in *The Polemic*. Reference is made to M. François Mitterand as "the Prime Minister of France."

M. François Mitterand, in fact, is President of the French Republic. M. Laurent Fabius is the Prime Minister.

Cordialement,

—Pierre Grosdidier
for the Francophile Club



BLOOM COUNTY

by Berke Breathed

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Great White Man

To the Editor:

Regarding the film "The Gods Must Be Crazy," would that there had been pickets outside the Music Hall Theatre, so that I could have been spared the humiliation of sitting through that South African comment on society.

Yes, it was interesting to see the positive portrayal of the Bushmen living in a primitive communal society, free of conflict and with gentleness, sharing, and complete caring for each other. The rest was a disaster.

I had hoped the days were long gone when the GREAT WHITE MAN would be portrayed as so superior to the native Americans, or orientals, or in this case Africans.

Yes, the whites outsmarted those Black Guerilla Devils, (but only with the skill of the Bushmen).

"Crazy" describes, rather kindly, the makers of the film. -Margaret Katz

Frequent Food Service Bids

from page 3

system because it would provide the company with a strong daily incentive to maintain the quality of the food and service. In contrast, it is difficult to convert general dissatisfaction with the food to positive action—i.e. ditching Servomation—under the current system. My proposal would be quite automatic, requiring no difficult-to-arrange elections or long, tedious committee meetings once the decisions to implement it had been taken.

In the event that such a contract is not feasible, then I suggest that it might be better to eliminate food service except for the pay when you eat at Chandler. I believe students could find better tasting and healthier food for no more money at local eating places.

Second, despite the Red Door Café and the Coffee House, Caltech still lacks a convenient nearby place to get a snack or one cut above the ordinary meal. Therefore, I propose a food concession be created on the first floor of the Winnett Student Center serving pizza or sandwiches or other "good" food. When auctioning the concession, I think it would be best to stipulate that the concession serve from at least 11 am until 1 am at night.

Such a concession would make the Student Center into a genuine student center by providing a compelling reason to go there. A bulletin board, a television, video games, and so forth could be added near the concession as seemed appropriate. Further, the concession would provide passable food within a short and safe walking distance. Finally, the sale of the concession would raise money that could be used for other worthwhile purposes.

If the reader likes either or both of my proposals, write to the Tech, talk to the MOSH, talk to your food service committee representatives, make noise; that is the only way to bring about change. If the reader disagrees, I welcome constructive criticism.

-John McGowan
Page House

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Errata

To the Editor:

Thank you for publishing my letter ("Outrage," 5 October, 1984). A typographical error appeared in the printed letter, and that error made a significant difference in the argument it accompanied. In the third paragraph on page 7, while discussing the OMB figures for percent change in after-tax income for the highest and lowest income brackets, the figures should read "...the percent change in after-tax income (adjusted for inflation) from 1980 to 1984 was -7.6% for the fifth of the American households with the lowest incomes and +8.7% for the fifth of the American households with the highest incomes"

Thank you for your attention to this error. -Sam Finn
Graduate Student, Physics

entertainment

Better Than the Movie

By Nick Smith

Whenever a "classic" of any type is adapted into a medium other than the one for which it was intended, the purists who fell most heavily in love with the original will scream bloody murder. "How DARE they make *Moby Dick* into a film?! Don't they know that Melville intended it as *prose*!?"

Pedantry aside, there is a certain justification for such objections. Many adaptations from one form to another really *are* terrible, classics or no. A well-crafted film doesn't necessarily convert well to book form, especially if the film was a highly visual one. Many works of literature have been mangled when converted into stage plays, films, television or radio, simply because the people doing the conversion weren't up to the task of converting the *imaginable* into the directly perceivable. A face or a voice that an author conveys perfectly may be ruined by actual visual or vocal presentation.

All that brings us to *The Hobbit*. Tolkien created a wonderful masterwork with *The Hobbit* and the more extensive *Lord of the Rings*. Several attempts to do radio and film adaptations have been made, a few tolerable, but mostly disastrous. Tolkien's works are very rich and full of detail, and it's difficult to actually portray enough of those details graphically to give the viewer the depth of feeling that a reader of Tolkien's originals receives. Thus, I was surprised to hear of a puppet troupe doing an adaptations of *The Hobbit*, and one good enough to be included in the Olympic Arts Festival during the summer. When I learned of the planned return visit set for Beckman Auditorium, I resolved to go see *The Hobbit*.

The staging used by the Theatre Sans Fil was excellent. The stage was very stark, almost totally barren except for a few sketchy props. This let the viewer's mind fill in the bits and pieces, rather than spooning them out to the audience like video pablum. Bilbo was

introduced with a brief musical passage and narration, and the mysterious nature of the visiting Dwarves was done, sweeping Bilbo (and the audience) up so quickly that it was a few moments before all realized that the Dwarves were *all* total strangers to Bilbo. Enter Gandalf, and the adventure begins...

If you're not familiar with the basic story of *The Hobbit*, I'm afraid that there's no way to condense it into this review. Suffice it to say that it's a quest story that is the prototype for much of modern fantasy, and that it's a lot of fun. The point is that *this* stage adaptation, with giant puppets being moved around by shadowy figures in the style of Japanese puppetry, succeeded far beyond what the Rankin-Bass high-budget TV movie ever achieved. The stage was ever dream-like, where the animated version was merely...grating, due to things done wrong.

The dream-like feeling of Theatre Sans Fil's version of *The Hobbit* was enhanced by the lighting, which was dim in spots except for the UV beamed at various luminous parts of puppets and props, creating the image of glowing eyes, webs and weapons. This was well done, and made eyes and swords and webs more real and more nightmarish at the same time.

The adaptation was, of course, simplified. You can't convert a full-length novel into a relatively short play without that. I must admit, though, that they got the feel of it right. The only translation oddity was the loss of a minor punch-line, when Bilbo's little sword, *Sting*, comes out as *Dart* (apparently a result of translation to French and back).

The puppets themselves were a masterpiece. It's easy to see why the puppeteers allowed the audience to come up on the stage after the performance. They were *proud* of the puppets, and justifiably so. The main characters were finely

detailed puppets. The mass of dwarves were mostly hats and noses, arranged so that they could be manipulated in groups by a single puppeteer. The goblins were wonderful; one of them wore a necklace made of a hand, an unnecessary detail that filled in just how *nasty* the goblins were. The elves were done as faces with ethereal bodies, impossibly tall and wispy. The trolls were living stone. Bilbo was a Hobbit, right down to his furry toes. Ah, but Gollum—now there's a masterpiece of a puppet! He looked so degenerate and deranged, a warped little thing in search of his lost soul, and what he valued in place of it.

Anyway, if you didn't go see *The Hobbit*, you've missed it. However, there's hope, especially if the people over at OPE have any sense. It seems that The Theatre Sans Fil has plans to do an adaptation of *The Lord of the Rings*, and expect to be able to tour with it two years from now. Every effort should be made to secure this puppet play for Beckman Auditorium when it becomes available. Theatre Sans Fil and their giant puppets were a delight to an audience of adults and children, and produced a wonderful play that I think Tolkien would have enjoyed seeing.

Buckaroo Reviews by Matt Rowe

Places In The Heart

It just struck me that an acronym for *Places in the Heart* would be the word *pith*. If that's intentional, it must refer to how basic a story it is—not to its importance. While it is a very good movie, its plot must have already been written a hundred times and filmed at least a dozen. It is 1935; we are in Waxahachie, Texas, where writer/director Robert Benton grew up. Sally Field plays Bess Spaulding, the sheriff's wife—and widow after five minutes. With her husband dead, Mrs. Spaulding has no source of income; to keep from selling her small farm and breaking up what is left of her family, she must find some money. With the help of the film's opening and closing Sunday Mass sequences, we know that *Places in the Heart* is about the faith she needs to keep her going.

Predictably, she succeeds. Aided by Moze (well played by Danny Glover), Mrs. Spaulding plants a crop of cotton and saves her house. Of course, there are obstacles: a tornado; male chauvinism (for Mrs. Spaulding); KKK attacks (for Moze); and all the emotional complications of a number of subplots. But it is not the story that keeps the viewer interested

in *Places*; it is, rather, just about every other aspect of the film.

First, there are the performances: Field and Glover, along with Robert Malkovich (as Mr. Will, a blind boarder taken in by Mrs. Spaulding) and—it seems—everyone else in the movie, act as though they were born into their roles. Next, there's the photography: every scene of *Places* could make a decent postcard. And the editing/direction: scenes that would be tedious if longer and forgettable if shorter are just the right length. In short, while *Places in the Heart* is not the sort of movie Techers generally flock to see, it should not be *avoided*. It is an enjoyable movie, if not always a happy one, and despite the age of the story, this is one of the best versions of it around.

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BLOOM COUNTY

by Berke Breathed



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Live From New York

by Ken Whang

THINGS DIDN'T START ALL ROSES. In just my first two days here, I was ripped off of \$120 and my car was broken into. So welcome to New York.

The money was a deposit that I'd put down in August on a room for rent. (It's very difficult to get a formal landlord-tenant lease in Manhattan, but people often sublet individual rooms within their apartments.) I was scheduled to move in the first Sunday in September, but the person I was supposed to be renting from didn't show up. So there I was with all of my junk and no place to stay for the night or leave my belongings.

Luckily, I ran across another tenant in the building who was nice enough to let me sleep in her living room for the night. She was an old Puerto Rican lady, around 60, and she spent the evening telling me, as well as she could manage in her halting English, about her family, about her religious beliefs, about her particular ethnic prejudices, and about what a crazy that neighbor of hers whom I was supposed to be renting from was. If nothing else, it turned out to be quite an interesting peek into one New Yorker's perspective on life.

The next day, I talked to the superintendent and the landlord of the building. It turns out that the person who had agreed to sublet to me, who was in but had refused to open the door all morning, was living off of welfare, food stamps, and illegal subletting under various aliases, and was basically the kind of tenant that they would like very much to evict. Since then, I've supplied them with evidence they'll be able to use for an eviction case and have begun to take some action myself to get my money back.

Well, that same day, my mother was getting worried to death when no one was answering the phone in the apartment that I didn't move into. So she, my dad, and my sister in Philadelphia drove up and found me here. I was so glad to see them.

We did some hasty apartment-hunting that afternoon, but to no avail. I also

tried several times to reach Ben, my friend here from high school, who seemed at this point to be the one person in this city of nine million who could help me out. I finally got through to him and arranged to crash on his floor for the next few nights. We moved most of my stuff into his room and other rooms in his dorm. Some things that I wouldn't need immediately we put back in the car to bring home, figuring that they could be mailed up some other time.

I could finally relax for a moment.

We went out for a nice dinner at this Chinese restaurant that Ben had heard good things about but had never been to. It had a reputation among Columbia circles as one of the best Chinese places around; besides, Alan Alda supposedly ate there. We didn't see Alan that night, but the food was very good and the service was excellent, the best I've seen so far in this city.

The waiter even made sure dad tore up the carbon from his charge record, reminding us non-natives that "This is New York."

Portentous words these were. We returned to the car, which hadn't really been parked in a bad area, to find it missing a rear side window, as well as much of what we had carelessly left exposed on and behind the back seat. Gone were a small cooler of nonalcoholic drinks, some winter shirts and sweaters, my winter coat, a comforter, and one of my favorite personal possessions, my unabridged dictionary. It was a pretty unorthodox selection, we thought, for your average thief. That incident pretty much topped off the day. Fortunately, nothing of particular seriousness happened that evening.

Back at Ben's dorm, Ben and I patched over the car window opening with cardboard and plastic, before my folks headed back south on the New Jersey Turnpike. It had been raining since mid-afternoon, so I was cold, wet, and very tired. Ben and I sat quietly for while as our shirts hung to dry. I had finally arrived at my new home.

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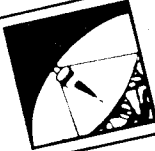
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More Stats

from page 3

Ford took office in 1974 unemployment was 5.5%; when Nixon took office in 1969 unemployment was 3.6%; when Johnson took office in 1963 unemployment was 5.7%; when Kennedy took office in 1961 unemployment was 6.6%; and when Eisenhower took office in 1953 unemployment was 2.9%.

Finn then states "Pitts' imagination again runs amok when he quotes figures for inflation [I noted two figures in particular]. The worst inflation seen in the *Carter years* [emphasis mine] was 11.8% in 1980 — nowhere near the 20% that Pitts claims."

In fact, inflation for one month of 1980 did reach 2% which on an annual basis comes to 27%, 7% higher than my rough figure. However, Finn's analysis here does deserve some credit, and I should have explicitly stated a broader measure of the Carter record, the enviable 11.8% that Finn quotes.

Finn continues with "The Reagan prosperity [finally, giving credit where credit is due] that Pitts speaks of is also false." He cites as evidence the Office of Management and Budget figures which "show that the percent of change in after-tax income (adjusted for inflation) from 1980 to 1984 was -7.6% for the fifth of the American households with the lowest incomes and -8.7% for the fifth of the households with the largest incomes."

If you're curious as to why Finn notes particularly the upper fifth and the lowest fifth of households, it is because overall, real disposable income per family, (i.e., income adjusted for inflation and taxes) increased 3.5% from 1980.

Finn also fails to remind you just how terrible the economy was that Reagan inherited, with rampant inflation, shockingly high interest rates and a declining GNP, and fails to inform you that the figures for the lowest incomes do not include noncash benefits.

Interestingly enough, in light of the figures so quoted by Finn, and the fact that the real incomes on average did improve, the real benefactors of Reagan were not "Reagan's rich friends" but "the average working American trying to make ends meet."

Next, Finn notes that "The tax cuts that Pitts speaks of amounted to .1% of the household *after-tax* [emphasis mine] income for the fifth of the households with the lowest incomes and 5.9% for the fifth of the households with the highest incomes."

Of all the analyses I have seen critical of Reagan's tax cut, this is the cleverest rabbit trick yet. Finn is assessing the dollar value of the actual tax cut and then dividing it by the income left over after the tax is paid. Note for instance the following extreme cases to make this fallacy very clear.

Suppose that if one person made \$50,000 and used to pay \$49,000 in taxes but now pays

only \$48,500 in taxes, then his tax cut is \$500 or a whopping 50% in Finn's book.

Another person makes \$8,000 and used to pay \$7,300 in taxes but now pays only \$7,200 in taxes, then his tax cut is 14% in Finn's book.

The fact is that the tax cut for wealthier Americans amounted in percentage terms (i.e. tax cut compared to the *before tax income*) was much lower than for poor Americans, but the dollar amounts (i.e. take that percentage and multiply it by the income at that level) was much larger for the wealthier Americans than for poor Americans.

However, to judge if this was unfair one should question seriously whether the taxes paid after the tax cuts are fair (i.e. tax rates for the upper incomes are still much higher.)

Moreover, since the upper income groups have been paying more taxes as the tax rates were lowered, several Democrats sponsored a bill to

decrease the upper income tax rates.

Finally, Finn quotes the not unbiased Congressional Budget Office which he claims states "... 35% of the 1982 [emphasis mine] Reagan tax cut went to the wealthiest [whatever that exactly translates into] 5% of the taxpayers."

He adds "The redistribution of wealth involved here is staggering." How the CBO concocted such a figure [even Finn's tax evaluation scheme above couldn't produce this rabbit] is one example of hat trickery, but that Finn can state in the very same paragraph that the after-tax, inflation adjusted income for the wealthy declined 8.7% compared to 7.6% for the poor, from 1980 to 1984, then decry that "redistribution of wealth" — implying that the wealthy have benefited at the "expense" of the poor — is a whole new form of magic.

After all, how many rabbits can fit in a hat?

Continuing his onslaught of

excruciating logic, Finn then states: "It is pointless to go any further [quite true] — Pitts' article is so ridden with blatant falsehood that any conclusions he might draw could only be considered fantasy."

He adds: "Why this blizzard of facts, this torrent of figures? Because for the past four years the nation has been seized by a sleeping sickness — a willingness to blindly accept any falsehood, distortion, or manufactured fiction uttered by Ronald Reagan." and so concludes "How can this illness be fought? The only thing that can be done, and I do that now, is to shine the light of truth into the shadow of distortion."

About the prosperity we are enjoying, with a solidly growing GNP, falling interest and unemployment rates, growing personal income, Finn reminds us "We live in a Dark Age now — the light of truth is present but people refuse to see it."

Finally, the only outrage present in Finn's article entitled

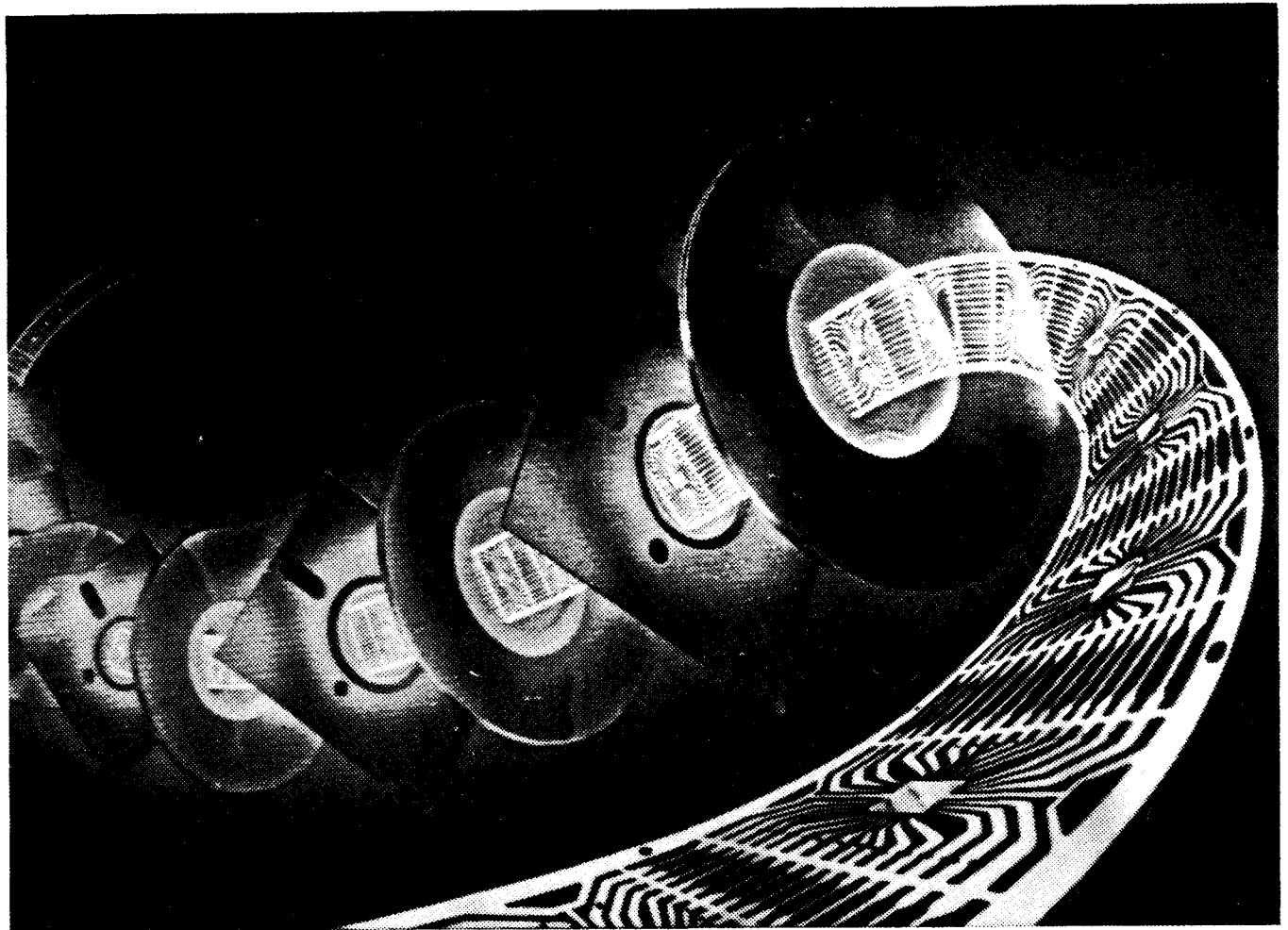
Outrage was not the slanderous "I say that Pitts would not know a fact if it came up and spit in his eye," but that I was misquoted: "Steve Pitts says that liberals 'refuse to learn from the facts'."

The line quoted originally read "His [Ronald Reagan] liberal opponents who refuse to learn from fact, slander him in every way possible...". In fact, I took great pains to point out that a whole wave of European Socialists, such as President Mitterand of France, have enviously observed the light of the thriving American economy with nearly seven million new jobs created.

They were once part of a "sleeping sickness" which overshadowed their economies — a loss of almost two million jobs due to their government directed programs to "save" them — but are now beginning to embrace that gem of prosperity: the free enterprise system.

No more rabbits out of a hat. —Steve Pitts

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Genesis II

by Polo Peccadillo

The Big Tournament, from *The Book of Dodd*, Chapters 1 (v. 3-10), 2 (v. 4-9), 3 (v. 1-14)

... In the days of old, when waterpolo reigned supreme amongst the sports of the Beavers, the Big Tournament came into being. It was a good thing, dictated by the Lord Dodd. And, lo, all the recent victims of Beavers were summoned, and they came, from the wilds of Whittier, the vast spaces of Redlands, and the polluted air of Riverside. They all gathered thusly at the pool,

as the sun broke the horizon and began its long journey.

The Lord Dodd had deemed that firstly, the Beavers should do battle with the Poets of Whittier. But the Beavers complained, "Surely, Lord, we should not do battle without the proper warm-up, for we are sluggish and drowsy."

"Nay," spaketh the Lord Dodd. "Go, I say, and defeat thine enemy, for he is weary from his journey and will make easy sport for you." And so the Beavers plunged into the cold water and prepared themselves

for battle...

... Long was the war, and it was fierce, for the Poets had a mighty warrior, and Paul was his name, and the Beavers strove mightily to contain him. Time and time again the Poets would attack, but the Beavers were proud and, inspired by the Lord Dodd's invocations, repulsed the enemy thrusts. Alas, finally, the Beavers grew weary. Their speed was

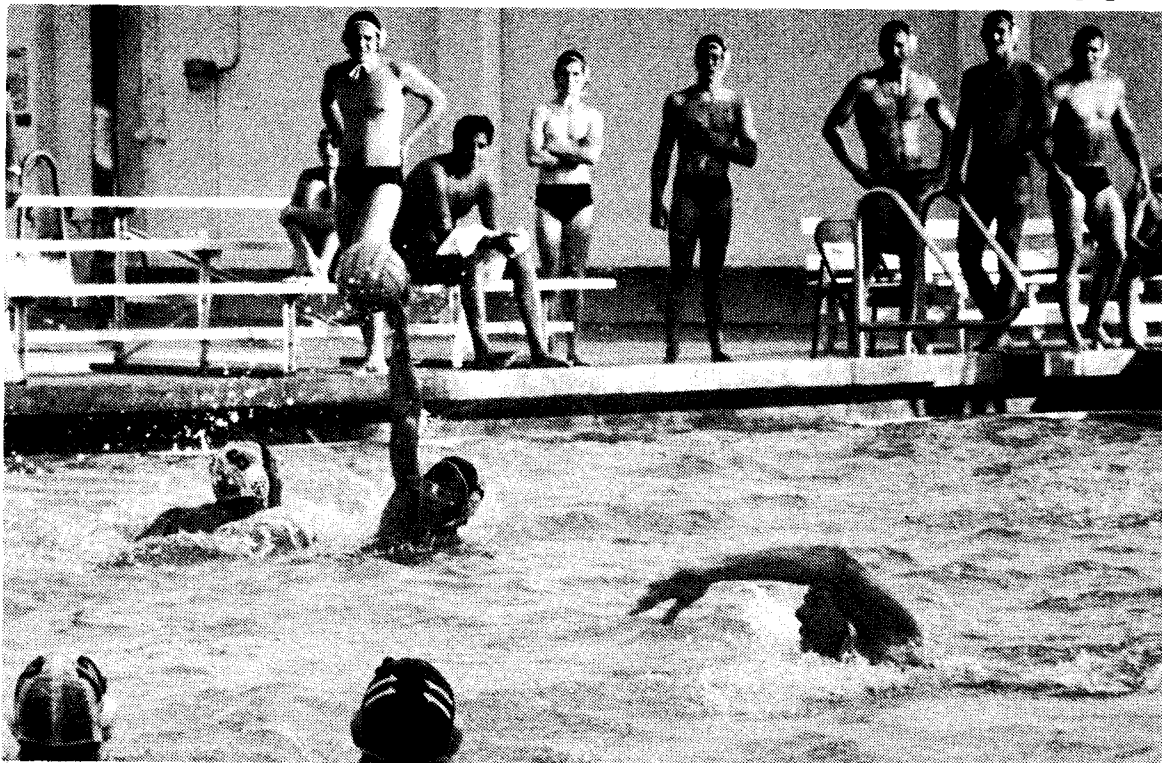
decreased and their quickness diminished, and Poets, led by the mighty Paul, began to make killing blows.

Eventually, only the young and inexperienced amongst the Beavers remained, and the Lord Dodd exalted them on to victory and sent them out to do battle. Alas, the Poets took to them like wolves to sheep and the Beavers were thoroughly routed and driven from the

pool. They hid in corners and in beds, in markets and in mañanas, until the Lord Dodd deemed they should return...

... Quietly, they snuck back towards the pool. In groups of two and three they came, intent upon revenge. And the Lord Dodd spoke thusly, "Thine enemy is at thy mercy, for I have laid him low by making him play two games in a row."

continued on page 11



Beavers in action

— Photo by Ron Gidseg

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sports

LIFE vs. Caltech

Women's Volleyball

by Busy Sue

Last weekend was a big weekend for the Caltech Women's Volleyball team. On Friday, we played LIFE Bible College. Then, on Saturday we played Redlands. Both matches we played out of our minds.

On Friday night we finally got our act together. Our passing was good, our setters did good, our hitters looked OK. There wasn't too much blocking because LIFE did not hit. Maybe they put the ball down once. First game we looked good—we missed a few, but we won 15-6. Not bad at all! Then, we really went after them. Everyone played it cool except for Linda S. who had only managed to get three hours of sleep Thursday night. Boy was she pushing on those LIFEers! When she came up to serve, she kept stuffing the ball right down this chick's face! By the time she was tired of beating on the other team, the score was 14-0. Finally, we won 15-3. Everybody played well on Friday, but we didn't really have a chance to show our stuff because LIFE wasn't too tough.

On Saturday, we played Redlands JV. JV my ass. These chicks were big! If they hadn't been so worried about their makeup and coiffed (their words, not mine) blonde hair, they probably would have beatun us hands down. They must have figured that we were just a bunch of short wimpy

engineers who had left our elevator shoes at home, because they started out real slow. We played like crazy, and they didn't show anything until the end of the first game: we won, 17-15. Cris M blocked the hell out of the ball and was hitting over their very big block. Nicole, our other middle blocker didn't get much chance to block because the Reds took one look at her and hit into the net; and she played great defense all over the floor.

continued on page 11

Run with Baptist and Whittier

by Big Mo

Last Saturday morning, the cross-country teams ran against Whittier and L.A. Baptist College in non-league competition. (We race Whittier "for real" this Friday afternoon at Pomona.) The major enemy this time was the Whittier

course, not the other runners. Basically, you run around the track and the softball field first. This is a warm-up for the studly part ahead. Next go past the soccer field, up the small mountain, then try not to trip as you go down the far side. Now run back up...now down

...now up...well, the good news is that you get to stop in five miles (three for women). More exciting is the knowledge that the League Finals will be held here next month. I'll tell you more about it then.

Despite this severely challenging terrain, Caltech did very well. John Beck won the men's race by a wide margin, though it was small compared to Jenny Haase's victory margin in the women's race. Everyone else did an outstanding job supporting these frontrunners. The men's team devastated Whittier 20-35 and trounced L.A.B.C. 17-38.

The women's team still needs more runners for team scoring. Overall, it was a successful day.

Weekly Sports Calendar

DAY	DATE	TIME	SPORT	OPPONENT	LOCATION
Fri.	10-12	3:00 pm	Football	Redlands JV	Caltech
Fri.	10-12	3:00 pm	Soccer	Pomona-Pitzer	Pomona-Pitzer
Fri.	10-12	6:00 pm	Women's Volleyball	Clare-Mudd-Scripps	C.M.S.
Sat.	10-13	9:30 am	Cross Country (M/W)	Whittier	Pomona-Pitzer
Mon.	10-15	4:00 pm	Soccer	Christ College	Christ College
Mon.	10-15	7:30 pm	Women's Volleyball	Pacific Christian	Caltech
Wed.	10-17	3:00 pm	Soccer	La Verne	Caltech
Wed.	10-17	4:00 pm	Water Polo	Whittier	Whittier
Wed.	10-17	7:00 pm	Women's Volleyball	CS San Bernardino	San Berdoo
Sat.	10-20	9:30 am	Cross Country	CSSB & Christ College	Caltech
Sat.	10-20	10:00 am	Soccer	Redlands	Caltech
Sat.	10-20	10:00 am	Water Polo	Redlands	Caltech
Sat.	10-20	1:00 pm	Fencing	Cal State Long Beach	Cal State LB
Sat.	10-20	1:30 pm	Football	Valley Nomads	Caltech
Sat.	10-20	2:00 pm	Women's Volleyball	Christ College	Caltech

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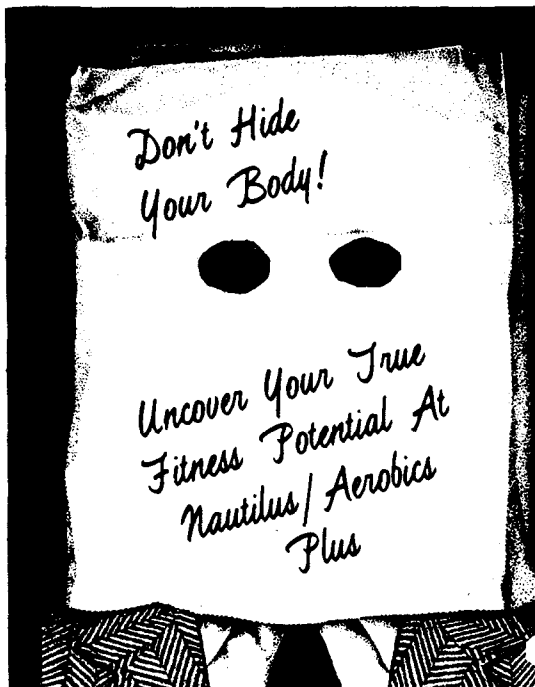
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sports

Genesis, Verse II

from page 9

And the Beavers took to the pool, ready to exact their revenge upon Redlands.

Long was the battle, but as the sun began to turn and begin its downward journey, the Beavers burst from their shell and began a furious onslaught. Not even the servants of the Web could stop them as they battered their enemy into total submission. Thus were the Beavers victorious, and they gathered around the Lord Dodd in praise and sang joyfully. They returned home, unaware of the danger lurking in the darkness...

...They came from Riverside, merciless pirates who

sought only to pollute and defile. They caught the Lord Dodd unawares and almost overwhelmed him with smog before he could summon his Squad...

The Beavers were tired from the trials of the day. They could barely muster enough strength to enter the pool, but they did, and the battle was joined. They were initially pushed back, but fought back fiercely, knowing that the Lord Dodd was on their side. Their holy cause was not to be fulfilled, however. Tired, dispirited, and suddenly clumsy, the Beavers were barely defeated, the fabled Mikasa only inches from the cage as the match came to a close...

...And so the Big Tournament was done, but even to this day, it is spoken of around the fires of the Seven Tribes of Beavers, as those valiant heroes recall the glory that was theirs, and the greater glory that almost was. But mostly they talk about the Lord Dodd, who led them and guided them from the depths of nerdiness to the heights of athleticism...

(Later that week we beat Rio Hondo, but I couldn't fit a good story to it. Over the weekend we played the Alums, but I won't lower myself to do an article about that game. Also—stay tuned for polo shirts—you'll love 'em.)

The End—Forever?

(You never know—the alums wield a lot of power around here.)

Women's Volleyball

Redlands JV, My ...

from page 10

Leslie and Tammy (that's Choy, not whatever got printed last week) didn't set up the biggest block in the world but compensated for each other's lack of height by playing the flying defense. Our setters Chris and Lynn outdid themselves as usual. Eventually, they beat us 15-10 and 15-13, but they worked for every point.

On Tuesday we played Oxy

in Glendale. Oxy is traditionally a really tough team, but we walked all over them. Everybody played well, but Oxy wasn't tough enough to force us to play great anything. We played a simple pass-set-hit game and didn't let anything drop.

Our next game is on Friday at Whittier, and then we play someone on Monday at 7:30 pm here at Caltech. See you then!



Left to Right: Steve Smith (a Rowdy), Neva Donovan (Troublemaker) Mark Maier (Minstrel cum Prince) and Laura Wilson (Tavern Keeper) in rehearsal for James Thurber's fantasy of Good versus Evil, *The Thirteen Clocks* which opens in Dabney Lounge on Friday Oct. 19th. This is the first of many TACIT (Theater Arts at the California Institute of Technology) productions scheduled for this year. Caltech student tickets are \$3, with a special deal for Freshmen. TACIT is still looking for help on sets and technical preparations. Anyone interested, show up at The Old South Steam Plant and/or Dabney Lounge at 11 a.m. on Saturday. TACIT will put you to work.

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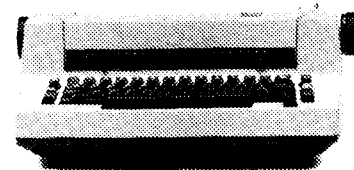
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announcements

Material for the announcement section of the California Tech must be submitted typed on or with the Announcement Form available at the Tech office by the Tuesday before the Friday of publication.

Computroll Money

A scholarship for up to \$5,000 for students enrolled in a computer science or computer technology program in a four-year college or university is being offered by International Computer Programs, Inc. of Indianapolis, Indiana.

To qualify for the 1985-86 scholarship, a full-time student must be a sophomore or junior who is maintaining a "B" average and is in need of financial assistance.

Applications are available in the Financial Aid Office, room 10 Parsons-Gates. Deadline is November 15, 1984.

Out Of The Closet

Is there an original *Gettysburg* set in your closet? Do you have a set of *Champions* rules hidden under your bed because you're afraid your roommate will laugh at you? Do your friends think "D&D" is a kinky sex act? Well, listen, friends, this is the last sixth of the twentieth century, and you needn't be ashamed of your personal preferences, pastimes or proclivities! If you like games, play them! Where? How about Clubroom 1, almost every Friday night (tonight included) where you'll find a wide variety of people loosely known as The Caltech Gamers. Most activity there centers on various fantasy and science fiction role-playing games, but it's a good time to meet people and arrange to play other games at other times. The Gamers also have a large collection of simulation board-games that can be borrowed. Undergrads, grad students, faculty, staff, alums, families, and friendly strangers are all welcome. A new series of *Warlock* fantasy role-playing just started, so it's a good time to break in. Games start at 7:30 pm and run until people decide to stop, so just drop in after dinner, the ASCIT movie, or whenever.

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Habakkuk Dig-In

This weekend, Oct. 12-13, there will be a Dig-In in Habakkuk led by Paul Byer, professor at Fuller Seminary, John Skidmore, and Chris Jacobs. This Old Testament prophet asks these questions: "Why does God allow evil?" and "Why do righteous men suffer?"

A Dig-In is a unique opportunity to study objectively a portion of the Bible. It begins tonight at 7:00 pm in 210 Thomas.

Big Pennies

A talk by G. Lee Kuntz on "The American Large Cent" will highlight the October 17 meeting of the Caltech-JPL Numismatic Society. Large cents were minted from the early years of the Republic until 1857 when the cent was reduced to its current size. Mr. Kuntz, a former JPL employee, is president of Masterpiece Medallions which has minted the recent editions of the JPL medal series. These medals, including the popular Voyager issue, will be available for sale during the evening.

All Caltech/JPL personnel and their families are invited to attend meetings which are held the third Wednesday of each month at 7:30 pm in the Church Laboratory Building on campus.

Scholarships

The Scholarship Research Institute of Washington, D.C., an organization specializing in aiding students and their parents in their efforts to locate funds for college, is offering three (3) \$1,000 scholarships. Applicants must be fulltime undergraduates with a GPA of 2.0 or above. For application and information, you should write to:
Scholarship Research Institute
P.O. Box 50157
Washington, D.C. 20004
Deadline for applications is December 10, 1984. Awardees will be notified by January 15, 1985.

Sukkot Party

Come celebrate Sukkot. Eat refreshments in a Sukkah and go swimming. Sunday, October 14, from 4 pm to whenever, at the Caltech Bayit—335 South Greenwood, Pasadena. Call 793-3859 for directions. *Everyone is welcome.*

CDC Seminars

Attention all graduating students: remember that Campus Recruiting started on Monday, Oct. 8. Just drop by the Career Development Center, Room 8 Parsons-Gates, for more information.

Each year the CDC gives several seminars on a variety of topics. The seminar schedule for BS/MS candidates is as follows:

Resumé Writing: Mon., 10/22, 1-3 pm; Tues., 10/30, 3-5 pm.

Campus Recruiting: Tues., 10/23, 4-5 pm; Fri., 10/26, 1-2 pm.

The Assertive Interview: Fri., 11/2, 1-3 pm.

There will also be a seminar for foreign students of all degree classifications about job search strategies other than campus recruiting. It will be held on Tues., Oct. 16 from 1-2 pm. All seminars will be held in Winnett Clubroom 1.

Missile Defense

Dr. Gerold Yonas, formerly a top-level scientist at Sandia National Laboratory and recently appointed chief scientific advisor for the administration's Strategic Defense Initiative Program, will give a presentation outlining the technical and strategic arguments in favor of the further development of ballistic missile defense. His presentation will be in Ramo Auditorium on Monday, October 15 at 8:00 pm.

CAG Meeting

There will be a meeting of the Caltech Action Group on Sunday, October 14, at 7:00 pm in the Caltech Y Lounge. All CAG members please attend. The meeting is also open to anyone else who is interested in current campus projects or programs, and all interested are invited to attend.

C □ L □ A □ G □ S

The Caltech Lesbian and Gay Society will meet again this Sunday at 2:00 pm in 210 Baxter. Discussion will include plans for a dance on November 2, possible speakers for this term, and ways of promoting better understanding of bisexuality and homosexuality in the Caltech community. There will be lots of food, and everyone is welcome.

Watson Fellowships

Essays for the Watson Fellowships are due on Friday, October 19. Seniors interested in applying for these travel fellowships should talk to Gary Lorden in the Deans' Office, 102 Parsons-Gates.

Want A Job?

The recruiting schedules going up on Monday, Oct. 15 in the Career Development Center, Room 8, Parsons-Gates, will be for the week of Oct. 29. Don't forget to bring your resumé, one for each interview you plan to make.

Space Resources

Mining the moon may be quite profitable in the near future, before the turn of the century. This will be the emphasis of a lecture entitled "Extraterrestrial Resources" to be given by Dr. Al Hibbs of Jet Propulsion Laboratories (JPL) on Saturday, October 27, at 7:00 pm in the Von Karman Auditorium at JPL. The program is sponsored by OASIS/L-5, the Greater Los Angeles Chapter of the L-5 Society. The program is free and open to the public. Call (213) 374-1381 for more information.


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