

Creative Learning Is Alive And Well At Caltech CDC

by David Callaway

If you have children between the ages of 2½ and 4½ and haven't heard of the Child Development Center, you are probably missing out on something.

The Child Development Center was established on Oct. 2, 1972, by a group of interested people of the Caltech community with the object of creating a basically unstructured environment for the children of the faculty and other employees of Caltech, as well as graduate and undergraduate students. It was designed to provide "special care" for young children of parents who could not take care of them during the day.

For example, if a child discovers that dragging a box creates a small channel that can be filled with water to make a river, this is turned into a learning experience. A teacher will explain why rivers flow, what they are, and so on. The real difference is that the teachers set up possibilities for the children for learning experiences, but the children themselves initiate them. There is also a sort of pre-school program, as well as such activities as swimming lessons in the summer.

Continued on Page Eight

VOTE!

Election for
ASCIT Secretary
TODAY!

Houses 11:30-1:00
Flora's office 'til 4:00



Honorary Darb Ross McCollum receives plaque from Harold Brown at Thursday's Mudd dedication
Photo by R. Feldman

IHC Shorts Out

In the shortest IHC meeting of the term, the matter of disbursement of money for Interhouse was postponed until the IHC has the money in its coffers.

Kleckner was authorized to send an open letter to the chairman of the Freshman Admissions Committee which reads:

A student's first year at Caltech is typically a period of emotional adjustment which the administration recognizes and attempts to make more bearable, in part through a pass/fail grading scheme which eases the overly competitive pressure that would otherwise be felt. The underlying philosophy here is that the student should develop a sense of self-worth through the achievement of personal goals, and not through a system of numbers and grades. We feel that the emphasis placed on test scores at Freshman Orientation was a mistake, and request that in the future more discretion be exercised in this matter.

Other than that, the only

thing of note is the donuts that were available at the meeting. The assortment of Pronto donuts, consisting of a dozen jelly filled, seven glazed, and random others was indeed a real treat for the members of the IHC who bothered to show. Everyone else was fined.

ASCIT of Acting

Money Pie Dished Out

by Dick Beatty

Mighty cosmic forces again coalesced last Monday in Winnett Lounge. Such power and majesty could only beget an ASCIT BOD meeting, and thus it came to be.

Although the meeting was scheduled for 4:00, no quorum was present. At 4:43 Liz called

New Mudd Dedicated; Geophy Gets New Home

by Alan Silverstein

The Seeley G. Mudd Building of Geophysics and Planetary Science officially became the sixtieth building on the Caltech campus during dedication ceremonies on the "South Mudd" patio yesterday morning. Six different persons spoke for a total of 45 minutes, after which the new building was open for inspection and touring.

R. Stanton Avery, Chairman of the Caltech Board of Trustees, began the dedication at 10:15 a.m. under cloudy skies that threatened rain. He spoke briefly about the past achievements of Caltech and expressed hopes for many more scientific discoveries here in the future.

Caltech President Harold Brown was introduced next and also made just a short presentation. He praised the Tech Geology department as the nation's best and said that the new Mudd lab "is tangible proof of Caltech's dedication to remain at the leading edge."

The speakers' rostrum was occupied longest, appropriately, by Professor Barclay Kamb, the division chairman of geological and planetary sciences. Dr. Kamb first discussed the history and

growth of geophysics and planetary science at Tech.

Dr. Kamb gave a verbal tour of the building in terms of its physical resources. The second floor and most of the south wing belongs to Geophysics, and is occupied by offices, an earthquake "nerve center," a library, workrooms, labs, seismo rooms, and a machine shop. The area directly below the patio is outfitted for quick field unit dispersal after local seismological activity.

Planetary Science owns the first floor and most of the north wing, with fewer labs due to the theoretical nature of the work it is involved in. There are, however, some work areas for the construction and testing of new instrumentation, including the Pioneer Mars '76 seismometer. During the idea of the new building; to Russell and Associates, who designed the structure; to Drs. Allen and Westphal for their assistance in design; and to the donors of Mudd South, including the Mudd family, HEW, the Lindhursts, and the McCollums.

Seismo Lab Director Don Anderson "was hoping to be able to arrange an earthquake" for the occasion, but reported that so far only a small disturbance had occurred recently. He kidded that we might, if lucky, still have a big one in the near future, but that there is no cause for worry as he was assured the building is earthquake proof. Dr. Anderson said that he expects the "nerve center" to become a famous site on campus pretty quickly, if for no other reason than that many reporters will descend on it after every significant local quake.

Dr. Bruce Murray promised to be brief in discussing his hopes for the future of the two departments because "this is the only planet on which rains are

Continued on Page Seven

News Briefs

ASCIT Musical Tryouts Set

The 1975 ASCIT Musical lives! Tryouts will be Saturday, Nov. 9 in 25 Baxter from 10 a.m. on into the night. Everyone is invited to audition. For questions call Tim Erickson, x 1011 or Flora Boyer, x2157.

CEAC Is Deperate

CEAC is in desperate need of workers this Saturday. We will be working from 10:00 a.m. to 4:00 p.m. You will receive a free Stottlemeyer's lunch plus \$2.00 an hour. If you're interested, please contact Bob Ritchey at 792-1524.

Grow Your Own Stuff

Dr. Thomas Weisner, an anthropologist at UCLA, will discuss "Alternative Family Lifestyles and the Development of

Children" Wednesday at 7:30 p.m. in Winnett Lounge. Come find out how to develop a kid alternatively.

Is Your Doggone?

A white samoyed dog belonging to someone on campus was picked up by the Pasadena Humane Society this Wednesday. The owner should either call them or Campus Security.

Doughnut Announcement

Remember, doughnuts are in Flora's office every Thursday at 4:15 p.m.

Vote For Secretary

Don't forget the ASCIT election today to fill the vacant Secretary's job. Vote during lunch

in the student houses, or until 4 p.m. in Flora's office in Winnett.

Bring a Friendly Guitar

There will be a guitar mass in Winnett Lounge this Sunday at 7:30 p.m. The guitar masses are on campus only the first Sunday of the month, so don't miss it. Bring a friend.

High on a Mountaintop

Today is the last day you may pick up *The Big T* in Flora's office. In the future, you must locate the infamous Ole Anderson (AFROTC building) to get yours.

Graceful Lectures

There will be two lectures
Continued on Page Three

Dear Mom,

I am fine. The food is lousy. I learned $F=MA$ today.

Love,



Not getting enough letters from your loved ones? Want to find out the rumor behind those ugly truths? Then subscribe now to *The California Tech*, Caltech's weekly undergraduate scandal sheet... just possibly the world's greatest newspaper.

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Throop Beat

Olive Walk Crackdown

by Tinsellonee

Enforcement is the key word for this week's Throop Beat, and it applies to the city of Pasadena as well as the Caltech campus. Tech is cracking down on parking violations on campus, with the intent of rigorously enforcing all of the rules you'll find on the back of your first (or second, or whatever) Olive Walk citation. This includes the tow-away clause, which has already been applied at least once. Be warned.

Pasadena, on the other hand, reacting to complaints of hordes of l.o.l.f.p.'s being mowed down by bicyclists on Lake, has been spewing forth moving violations at an unprecedented rate. Bicyclists who can't afford five dollar fines should move to the asphalt in business districts, watch for stop signs, signal when making turns, and otherwise be wary.

Closer to Usual

Greyhound Food Service (which may or may not tell us what those "steaks" were) might very well be losing money, but no one knows for sure—yet. They're operating on some kind of five-week plan which, roughly translated, means that no numbers will be available until second term. The question of how they'll do financially arises because last year the contract price settled upon was amazingly low for the services promised.

The Food Service has been running out of some food items, especially at lunch. Often, one of the offerings at dinner has been barely edible reused leftovers. They, on the other hand, have been so far responsive to student feedback. Most of the seven food reps also work as waiters in the houses, and their weekly meetings have produced student-originated menus.

Throop Waterfall

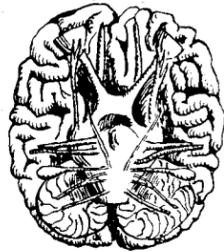
Mr. Dunham of the Architect's office says that the waterworks at the old Throop site could be landscaped by the end of November if the weather is QX. As soon as the pond people get done, B&G will take a month to do planting. No biofilter will be installed for the moment, which means no fish for a while.

Gates is being used for storage pending conversion to an administration building. If the final cost estimate for refinishing is less than \$50K, then Physical Plant will probably get the job, with aid on design from the architects.

Computer Performance

Are undergrad computrols using more time than last year on the PDP-10? It seems too soon to tell. Separate accounts are still being tabulated, though. And NSTAR becomes more and more popular...

Meanwhile, five terminals are being moved into Jorgensen from somewhere else. It's also rumored that more terminals will be placed in the student houses. On the latter we'll just have to wait and see what happens.



from the cerebrum

ASCIT At Large

by Dennis Mallonee

The question is: just what does ASCIT do?

For the past several years, the student body corporation has served primarily an administrative function. The BOD has gathered up its \$22.50 a year and redistributed it according to requests and according to whims very much like the Country Joe disaster a couple of years ago. The corporation has held elections, eventually, which have had little more effect than to transfer authority from the class of '75, for instance, to the class of '76. There have been few programs brought forward that there were pervasive in scope, and none have met with any real success either in academics or in social activities.

ASCIT sits on its ASS and attempts to remain in harmony with the events that happen around it.

Maybe the Caltech undergraduate population really needs to be represented by an organiza-

"Rip Off" Usage Gets Support

In your Forum last week, Dr. Newton objected to the use of the slang term "rip off" on grounds that it disguises the essentially immoral nature of the act to which it refers. I wish to express a difference of opinion.

In the evolution of language, terms related to important aspects of the users' environment tend to grow in usage, while those whose antecedents are no longer important to the users slowly pass out of the common usage. Initially, individual new words are not accepted by the entire population and are called slang, or non-standard forms. For a word to increase in use, its

corresponding idea must occur in users' minds more often.

National statistics support the proposition that crime of various sorts is increasing in urban environments. Why then should we object to new terminology arising from the trend's sociological effects on the student?

More specifically, "rip off" is by no means a substitute for "steal." The following examples demonstrate proper use of the slang in which "steal" would be inappropriate.

Food service is a rip off. (bad deal)

Can I rip off these matches? (use, borrow)

Chem 21 ripped me off. (did me in, dealt unfairly with me)

As these examples demonstrate, "rip off" has a broader connotation than "steal," dealing with any situation in which an advantage is taken by one party of another's resources, material or spiritual. Stealing is a specific act violating a dictate concerning property. The case in question, that of insurance of honorable conduct between one student and another, deals with infringement of rights, not the taking of property from a corporation. I submit to you that the term "rip off" was rightfully used, and that in fact "steal" would evade the real issue at hand.

-Chuck Nichols

Shmuckputz Gives His Explanation

I used the expression "rip off" in my article rather than "steal from" because people would probably not "steal from food service" given the serious wording of that phrase. "Ripping off food service," however, tends to trivialize the immorality of the act. The Sense of the sentence, then, is "You may dismiss the immorality of stealing from food service as a mere prank, but the IHC will try you anyway for the offense that it really is: thievery."

-Shmuel Shmuckputz

FRANKLY SPEAKING

by Phil Frank



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THE ASCIT FRIDAY NIGHT MOVIE

Who Is Harry Kellerman . . . ?

7:30 p.m. & 9:30 p.m. in Baxter Lecture Hall

Admission: 50¢—ASCIT members and their guests; \$1.00—anyone else

NEXT WEEK:

Pretty Maids All in a Row

THE CALTECH FORUM

How Much Stuff Does Each One Get?

If Santa Fe (capital of N.M.) is 6959 feet high and Denver, Colo., is 5280 feet high, which is the highest?

-R. V. Langmuir

Big T Editor Misses The Point

I read with interest a letter to The California Tech by Professor Charles Newton. With all due respect, I dissent. It is true that we should call things by their right names but, let me point out, names are right only by convention—and conventions change. Change is the basic law of nature and this has been recognized by mystics (with their ever-repeating emphasis about the non-permanence of things) and scientists (who spend their lives studying nothing but changes).

Words like thief, robber, murderer and so forth, have for centuries carried negative connotations based on naive notions of the good guys and the bad guys. The origins of these classifications is the not so innocent history of class, racial and national domination and economic exploitation. Behind this history lies a sad neurosis of civilization, the tragic story of pathological possessiveness, a cruel and incompassionate rape by human beings.

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The Third Wing

Propositioned!

by Nick Smith

Next Tuesday those of you who remembered to register to vote will be determining the fate of numerous candidates, 17 state propositions, several county questions, and the fate of rapid transit in Southern California. That isn't bad for an off-year election.

Some of the ballot propositions are sort of obvious in their intent and need. For example, Proposition 1 is for the authorization of the issuing of bonds to pay for making sure that school buildings don't fall on children during the next earthquake. No matter what you think of children and dogs, this one is important. Proposition 2 allows cities and counties to change their charters without a "Mother, may I?" round with the State Legislature. In many cases, however, the issues are not quite so clear-cut.

Proposition 5 is a proposal that would allow individual cities and counties to require Civil Service workers to live within a "reasonable" distance of their work, but prohibit them from requiring residence within the city or county itself. The issue is muddled enough that the Mayor of Los Angeles wrote the argument against the measure, and the Police Chief of L.A. wrote the argument in favor. The real point seems to be that large numbers of middle-class govern-

ment employees don't want to have to live in the places they deal with, especially when their cities are largely *not* nice, middle-class communities. They argue that there is no reason why a city or county should dictate where their employees should live, so long as their working effectiveness is not impaired. Those against Proposition 5 point out that if a police or fire officer does not live in a community, he or she does not have the same long-range interest in making and keeping that community a good place to live. The passage of Proposition 5 would guarantee civil servants the right to live far enough away from the problems of their communities that they might become detached and indifferent, in the opinion of some of those who oppose the measure. A yes vote is in favor of the rights of the individual. A no vote is in favor of the rights

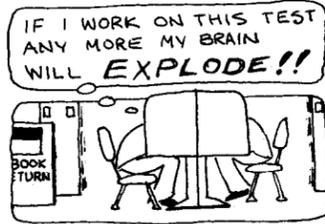
Continued on Page Five

A Letter From Madam R

Kind of Nice in Boris's House

I suppose you have all been wondering what has happened to me. Due to various circumstances I felt that I could best serve the revolution by moving operations to a new location. Revolutionary thought was stagnating at Caltech. Sometimes I had the feeling that all those fertile minds were full of fertilizer, so to speak. Also, our organization was falling victim to complete censorship the last few weeks of the so-called school year. At least you could have printed my farewell article so that all of you fascist reactionary turnip heads could rejoice at my departure.

I have been moving around, searching for some ground in which to sow the seeds of revolutionary thought. At one



Micro, Macro, Encyclo, Propaedia

Britannica 3, by Schroedlu!

by Etaoin Schroedlu

"The first complete restructuring... since the original three-volume set was introduced 206 years ago," trumpets the news release. What all the publicity is about is the new (well, less than a year old) edition, the fifteenth, of the Encyclopaedia Britannica (tricky spelling). What the P.R. people mean by a complete restructuring is that now a user doesn't know where to look to find a subject any more.

The 30-volume set is divided into three parts, a 19-volume set called the Macropaedia, which contains most of the n-pages long articles, a 10-volume set of

Micropaedia, which contains the short articles, and a volume of Propaedia, which is supposed to tell you how to use the other 29 volumes, something which was not considered to be necessary in earlier, simpler days. (There is also a pamphlet explaining how to use the Propaedia.) Needless to say, until getting the hang of it, a user invariably looks in the wrong set first. On the other hand, cross-referencing is extensive and clear, and this is a true advantage, and the volumes are filled with impressive quantities of illustrations, many in color, tables, diagrams, maps, and other aids.

The new Britannica set, called Britannica 3, claims 4,277 contributors from 131 countries, and kindly sent the *Tech* a news release listing, among other California sources, the contributors from the Caltech community, who include:

-Roy Cameron, JPL, who wrote the article "North American Desert;"

-Marshall Hall, Jr., professor of mathematics, part of "Algebraic Structures;"

-W. Barclay Kamb, professor of geology and geophysics, "Physical Properties of Rocks;"

-John R. Pierce, professor of engineering, "Satellite Communication;"

-Charles F. Richter, professor of seismology, emeritus, "Earthquakes;"

-Robert P. Sharp, professor of geology, "Wind Action;" and

-C.A.G. Wiersma, professor of biology, "Sensory Reception."

Consider This To Be

Perhaps of more interest to Teachers are the articles about Caltech people; there are over a dozen biographies of greater or lesser length on our men of the present and recent past, including Drs. Carl Anderson, Don Anderson, Harrison Brown, Max Delbruck, Richard P. Feynman, Murray Gell-Mann, Marshall Hall, Robert Leighton, Linus Pauling, John R. Pierce, Charles Richter, Maarten Schmidt, Jack Schmitt, Robert Sharp, and Eugene Shoemaker. If you assume that these articles would be in the larger Macropaedia, you are off to a good start: they are in the Micropaedia.

I purchased a set of the Britannica 3 several months ago, providing the opportunity to form the judgments expressed above and below. I had a great deal of difficulty with the Britannica bureaucracy (which had solicited my business originally, rather than vice-versa), which led to several months of delay in the filling of the order, which enabled me to obtain the Britannica 3 in the first place—they had been trying to sell the

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News Briefs

Continued from Page One

given this week by Brewster Grace, our current visitor from the American Universities Field Staff, Thursday, October 31, 4:00 p.m., "Key Issues in Food and Population in Thailand," 318 Baxter, Friday, November 1, 2:00-4:00 p.m., "Current Problems and Progress in Thai Agriculture," Judy Library. You are all cordially invited to come.

point I crossed the border into Canada, and, having some trouble returning, I was forced to hide in the trunk of a car belonging to a draft evader. Well, I believe I have finally found a place in which to continue with my work. "Why Rhode Island?" you may well ask.

Rhode Island has a great revolutionary history, being the first independent republic in North America. It is also a center of religious freedom, something I strongly believe in (of course the goddamned Jews, Catholics, and Baptists have carried things too far). That, and I was about out of money. Fortunately I knew that a comrade was living here in Providence. You may remember him as Rob Olshan, although these days he calls himself Boris Olshansky. In true revolutionary spirit, Rob has allowed me to stay here with him in order to carry out the work of the people. And he has saved a heroine of the people from the indignity of having to go out and work at some menial job with

the common rabble. I am being fed and sheltered, and in return I am lovingly creating the blueprints of the revolution. Rob had some trouble with the FBI in Seattle, but I believe we are safe here.

Oh, Rob asked me to pass along this message: while folk dancing last Sunday night in Cambridge he ran into an old acquaintance, whom he referred to as "Marvelous Marv." He said you would know who that is.

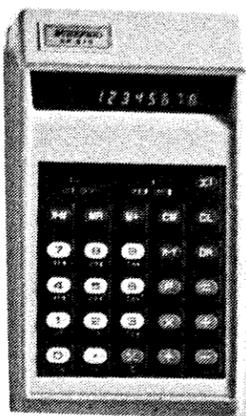
I would appreciate receiving any press clippings relevant to the cause. As we are living in true revolutionary poverty, we cannot yet afford a subscription to your newspaper. As Rob says, "Hell, for four dollars I can go downtown and see a porno movie, which is certainly better than thirty-one issues of that rag."

Also Rob would like to know how Mr. Claypool found out where he is living. Is the FBI in on this?

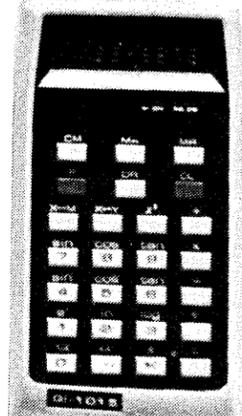
Sincerely,

Madam R

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One of the great mysteries of first term has been resolved. The vaguely ubiquitous KK has proved himself to be far more vague than ubiquitous, and so his initials will no longer be gracing our fair columns. The loser has been the Ice House in that it has lost coverage, though you have also been a loser in that you haven't heard about it. So we will rectify the situation by reviewing the Ice House on rotation, bringing you a variety of sparkling styles from all the pens of our many reviewers. Now isn't that something to look forward to?

I've also had some comments on last week's column—a new plateau of reader involvement. Some thought it was my best (brevity being the soul of wit) and some were incensed that I should have said culture was taking a vacation. To all of which I politely reply.

Philistines Bite It Big

However, to show how well culture really is doing, I will relate some of the many wonders on offer now. Dirty Dave's current Baxter exhibit, which is kinetic art, is the fourth I have enjoyed in three years and is well worth a visit. Spectrum VII rises phoenix-like from the ashes next Friday to present Henrik Ibsen's *Ghosts*, one of his finest works, featuring veterans of the field who promise excellent work. This will cost the teacher only \$1, and is the most convenient source of drama extant, barring of course the beloved Lit 110.

Saturday the 9th is the date of the Leakey Seminar, "In Search of Man," which lasts all day in Beckman. Featured speakers include Dr. Munger, president of the Leakey Foundation, Dr. Jane Goodall, Dr. Irvn Devore, Dr. David Hamburg, Dr. James Olds, and Dr. Phillip Tobias. Although yesterday was the distribution of freebies and discounts, there are still student tickets at \$25 available, and serious thought should be given to attendance.

Musical Retinue

The 71st Coleman season opens on the tenth with the Quartetto di Roma, one of the world's foremost piano quartets. The Coleman events are an institution in the Southland, and we are proud that its home is Beckman. To aid the destitute Techer to see these events, 100 tickets will again be offered, 50 free and 50 at \$1 on the Tuesday preceding the concert (Nov. 5) at 10:00 a.m. in the Caltech Ticket Office.

Culture exists off campus, too, and for your perusal I have culled the following from my mail and the omniscient *Calendar*. Players U.S.A. is producing "Indian Tales," a show based on tribal stories of the American Indian. It plays week-ends in San Gabriel, and information may be had by calling

281-1286. Alex Segal is directing the Kaufman-Hart comedy *You Can't Take It With You*, which opens November 6 in USC's Bovard Auditorium. Dale Wasserman, perhaps best known for *Man of La Mancha*, and Ken Kesey have made Kesey's *One Flew Over the Cuckoo's Nest* into a play which will open Tuesday at the Huntington Hartford, with William Davane in the lead rather than James Farantino. The Janus Film Classics Festival at the Los Feliz Theatre will present G.B. Shaw's *Major Barbara* this Wednesday and Thursday.

Libraries Lick It

Libraries get their licks in, too. With the arrival of November, the Huntington Library reopens, and it is well worth a few hundred visits. Monday at the Francis Bacon Library in Claremont a new exhibit opens, "Witchcraft, Black & White," tracing the well-loved art in books and artifacts from the 17th century to the present. Depending upon how desperate you are, you may wish to research this with reference to Midterms.

In order to more thoroughly familiarize you with culture in the area (for this column can list only the very prominent along with that which catches my eye) we will soon begin a series profiling the muses' efforts locally from the amateur and collegiate level upwards. This should orient you well enough to push your horizons in whatever direction you wish. Watch for it.

—Chris Harcourt

Cerebrum

Continued from Page Two

year, has disappeared back into the nether regions from whence it came. The Athletic Committee has never met.

Trying to move that inertial mass was just a little bit too much to do from the position of Secretary. It could be that it's too much to do from any position, but Mark Johnson and Liz McLeod would be able to say more about that than I can.

Got any ideas, Liz?



the

critical

ear

LOUISVILLE ORCHESTRA FIRST EDITION RECORDS; Jorge Meister, conductor; 115th release; Concerto for cello and orchestra, Frank Martin; Concerto for two violins and string orchestra, Malcolm Arnold.

The passionate search for the absolute in art is extraordinarily dangerous, because it brings about impotence. It is the exact counterpart to the religious search with the aid of a magic formula, so as to gain Paradise without creative effort.—Frank Martin

The above passage, written by Frank Martin in 1943, sums up much of his creative beliefs, still active when this piece was written, almost a quarter of a century later. Martin's fruitful pen produced in those years such brilliant works as the *Petite Symphonie Concertante* (for harp, piano, harpsichord, and strings) of 1945, the *Concerto for Seven Winds* Timpani, and Strings of 1949, and the *Violin Concerto* (1951). Born in Geneva Switzerland, on Sept. 15, 1880, he is still living at the time of this writing in Naarden, Holland, where he is continuing to compose. The last years of the decade past saw the production of a tremendous *Second Piano Concerto* (1969) and a *Cello Concerto* of similar proportions and dramatic force. Despite the almost Stravinsky-like aspect of his music, he retains a distinctly new creative element, coupled with a Swiss accent that is unmistakable.

In the first movement, a *Lento-Allegretto moderato-Lento*, he expresses a particularly deep and subtle mood which finds its way through a series of well-done contrapuntal episodes after the initial prologue for the cello alone. Strings, harp and piano allude quickly to the sober and powerful mood evoked in the opening lines. With the switch to the *Allegro*, the flute announces a change in tempo that is passed along to the woodwinds, returning to the cello, and followed by a beautiful oboe passage. It is then the counterpoint takes its most dramatic turn, with the

echoing of the cellist proceeding with extensions and embellishments of the main theme.

The second, slow movement, an *Adagietto* in a meter that is an easygoing triple, consists of a series of passacaglia movements brought against a slow, rhythmic pulsing from the rest of the orchestra.

In the closing movement, the influence of that colossus of music, Arnold Schoenberg, becomes evident. The twelve-tone scale Schoenberg devised becomes a basis for the striking chromatic passages that add life and beauty to the piece. In a swelling series of lyrical encounters, the composer ends the music with a swirling but compelling series of trills, tremolos, and pizzicatos. As the composer says:

In view of such extreme and contrary demands, a work of art reflecting creative serenity will be achieved only rarely and with great difficulty. Rather, it will reflect struggle, struggle within, with the public, and, above all, with those ordinate and contradictory demands. But the composer is powerfully stimulated by this situation, for in his heart springs the hope eternal to reconcile or encompass those two opposites, i.e., originality and fierce turbulence on the one hand and calm beauty and serenity in the other hand....the new and classic work that the public expects. How wondrous and how impossible.

On the other side of the record is the equally famous *Concerto for two violins and string orchestra*, by Malcolm Arnold, who is also a conductor

and virtuoso trumpet player. Arnold, British by origin and residence, has had all too little publicity this side of the Atlantic. Except for recordings, he has all but remained in England, much to our loss.

A strict traditionalist, Arnold brings forth his ideas in a new and striking fashion, much like the great composers of the Classical era. He has, however, avoided the strict doctrines without sacrificing the clarity of the previous composers. The first movement of the *Concerto*, for example, is cast in the traditional three-part form, but the initial presentation of ideas does not incur a later reinstatement of the theme. It is this sort of duality that has ensured the great amount of fame that Arnold has enjoyed.

The first movement, an *Allegretto risoluto*, expresses a traumatic and energetic sort of composure, somewhat like the later works of Carl Ruggles, or perhaps with a little pre-Bach thrown in for spice. The contrasting forces of the orchestra, so difficult to achieve with only strings, seems timeless and tremendous. When the more ambitious developmental section in the second part is reached, there is not a doubt as to the excellent craftsmanship that this piece represents.

The slow movement involves more deliberation, more like the *Bydlo* of Moussorgsky's famous *Pictures at an Exhibition*. With the even quarter notes of the initial mood fixed firmly in our ears, we come to a first high point, where the soloists declaim in parallel in a sense-whirling set of parallel thirds. A calmer echo in the orchestra attracts the soloists again, and with muted pianissimo passages, draws to a close. And the final *Vivace* is no less amazing. Set on the pure Celtic rhythm of the jig, it brings back ancestral memories of ancient festivals, but always eludes the imagination with its twisting and turning arpeggios. Finally it turns, rather than draws to a close, and the music is over.

—David Callaway

Caltech football in the *Wall Street Journal*? Next they'll be writing about pizza from

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Watson Lectures

Mormon History Traced

by Dennis Mallonee

The second Watson lecture of the season was held Monday evening by Dr. Rodman Paul on the topic: "The Mormons—Yesterday and Today."

Dr. Paul gave a broad overview of the history of the Church of Jesus Christ of Latter-Day Saints (the Mormons), including an explanation of the stereotype of the Mormon family of today (middle-class, slightly conservative, family-oriented) and how it was derived from the Mormon image of 140 years ago (radical social reformers, socialistic, family-oriented).

Dr. Paul traced the Mormon heritage through the murder of their founder, Joseph Smith, to the settlement of the Salt Lake region, and to the habitation of most of the inter-mountain region. Claiming that a desire to end their persecution by the federal government (for polygistic reasons) could very well be the key to the image transformation, Dr. Paul pinpointed an

1890 proclamation by the then-president of the church disavowing all practices of polygamy as the turning point.

In harmony, then, with the federal statutes, the prosperous Mormon communities were free to develop along new lines. Dr. Paul argued that the natural allies (politically) of the elderly leaders of the Mormon communities, most of them successful businessmen, were to be found on the conservative viewpoint.

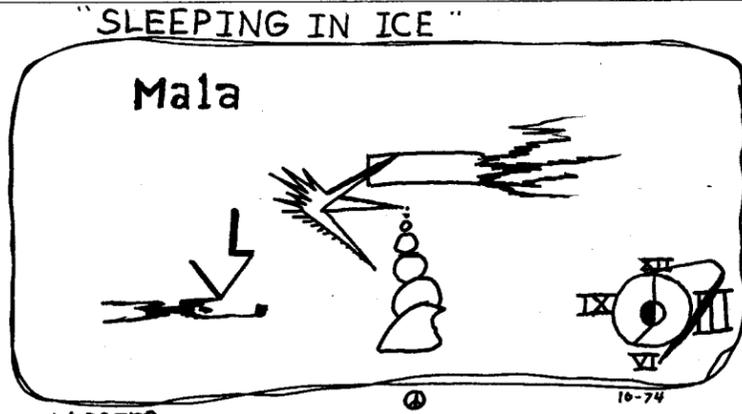
The image of the Mormon church was changed, indeed. It has become a prosperous organization of two and one-half million members in the United States and a million and one-half more throughout the rest of the world.

Third Wing

Continued from Page Three of the community.

Proposition 7 is an effort to finally bring the Constitution of the State of California into line with the U.S. Constitution, as well as clarifying a number of points. It is part of a process of fixing the stupid thing, a process that has taken ten years. It will be a good thing to have done with it. You would think that a simple thing like making California agree with the laws of the rest of the land would be a simple thing, right? Wrong. It seems that the Assemblyman from the 64th district objects to the fact that under the new version of the law, it will be more difficult to discriminate against minorities when selling your house. I pity the poor man. It isn't easy trying to live in the 19th century.

Proposition 10 would restore the right to vote to persons convicted of felonies, with, of course, the provision that they have served their time or paid their fines, or whatever. The idea is that the payment of a debt to society is complete, and that the



Social Scientist To Visit Tech

Jon McLin who covers the North Atlantic area for the American Universities Field Staff will be visiting Caltech from November 11 to 22. He will be giving a public lecture on "Western Europe and the World Food Crisis" while he is here. If you would like to meet with him, have him lecture in a class, or entertain him, please let Barbara West or Darcy Williams know (x1073).

Dr. McLin is a social scientist based in Geneva with the American Universities Field Staff. He took a B.S. in physics before going on to a PhD in political science. He has been working on international implications of oil exploitation, fishing, and pollution in the North Sea and North Atlantic.

Beatty's ASSKISS

Continued from Page One

transacted before the meeting began," which could have serious moral implications. Various changes were made to the proposed budget (revised version hopefully in this week's *Tech*). The revised budget was approved, but can be changed as circumstances dictate. In a final gesture of profundity, the meeting adjourned, to gather again Friday, November 8, at 4:00 p.m. in Winnett.

ASCIT elections today for Secretary; in the race is Marie Beall. Vote in Flora's office or in your house at lunch.

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loss of the right to vote is not a viable interest charge. Proponents of the measure hold that the loss of voting rights is a continuing punishment and second-class citizenship. Opponents of the measure take the "law and order" tack, stating that the loss of voting rights should be part of the punishment, since that is the "traditional" way of things. (One might also argue that the rack was traditional.)

Proposition 12 also has to do with rights, but in a very different way. It is an attempt to streamline that part of the State Constitution dealing with the Public Utilities Commission, which is currently camouflaged by such legalise obfuscations that "even lawyers cannot understand them and must go to court to have their meaning determined." Anything which makes the Public Utilities Commission comprehensible can't be all bad.

Bill of Sex?

Proposition 11 is the white flag of legislative sexism. It changes all of those nice convenient references in the state Constitution from *Assemblyman* to *Assembly member* and so on. It is the sort of change that

never should have needed making, but it does, and so it is.

There seem to be several Propositions with little or no impact on the real world. One example is Proposition 13 (naturally) which allows the cities in San Diego County to admit that San Diego is shaped funny, and act accordingly. The problem would not exist, it seems, except for the fact that San Diego is discontinuous as far as dry land is concerned, connecting its fragments by corridors under water. The entire state is burdened with figuring out what to do about it.

Proposition 15 repeals the law requiring the citizens of a city, town or county be allowed to approve or veto the construction of low-rent housing in their bailiwicks. In this case, there are definitely two sides to the issue. The proponents say that the requirement of local elections to approve low-rent housing has helped prevent much-needed housing from being constructed with federal money. There are 300,000 elderly persons in California who live in substandard housing. Clearly housing is needed. The hitch is that many communities have a "but not here" attitude about low-rent housing. These communities now have the right to refuse to allow the construction of state or federal public housing of this

type. Since Article XXXIV (the one in question) was enacted, 70% of the low-rent elections have approved the projects. That, however, means that 30% went against the construction of housing. This is one of those cases of the needs of the communities versus the wishes of the communities. A Yes vote is in favor of needs, a No in favor of wishes.

Bill of Water?

Proposition 17, the Wild and Scenic Rivers Initiative, is the controversial issue of this election. By controversial, I mean that it has had more lies told about it than almost any other ballot issue this year. It seems that the Army Corps of Engineers found some free-flowing water with no major dam around it, and couldn't let the opportunity pass. They want to build the second largest rockfill dam in the nation on a stretch of what is considered some of the most beautiful waterway in the state. Proposition 17 would include the Stanislaus River in the existent California Wild and Scenic Rivers System. This measure allows construction of dams and such only when necessary for such reasons as flood control. The opponents of the measure have tried every dirty trick in the book to confuse the issue, even to the extent of claiming that a

Continued on Page Eight

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audience

Six evenings ago, Don Ellis came to Beckman Auditorium with his big band. His performance started late and ran even later, but struck a receptive chord in the audience who asked for more at the end.

Although the orchestra lacked some elements of the technical proficiency which comes from working together continually (which many of them do not do), their embellishments to the original sheets tied together very effectively.

Was It Really?

In the beginning there was something that appeared to be an impromptu jazz session. The various sections of the orchestra were introduced to the audience then, the saxophones dominating throughout that performance, as they did throughout the program. This was the only flaw in an otherwise well structured group.

Most of the rest of the program was Ellis's own compositions, including the strange *Passacaglia and Catch Up, Please*, written in standard nineteen count (3-3-2-1-2-1-2-2-1-2), and *Salvatore Sam*, a salute to Sam Falzone of the saxophones.

Yes, It Was

The audience refused to be satisfied after the last scheduled song and rose to their feet demanding more. Ellis eventually acceded and created an unusual scene in the usually staid auditorium. Refusing to perform if the audience sat again, he launched Falzone into a boogie number.

And people started to dance. The front of the Beckman stage filled, the aisles were occupied, people danced in front of their seats. When Ellis left it was to more applause than he'd gotten even on his first exodus.

It was a strange evening.

-Dick O'Malley



SOPHOMORES Jim Brubaker (right) and Bill Dower during their well received noon concert last Friday. Photo by Terry Sheehan

Britannica

Continued from Page Three

previous edition right up until the day the new one came out (with no advance warning even to the salespersons, my salesman told me, for what it's worth). They also neglected to cite the entire full costs to me of the transaction until I had agreed to buy: such items as transport charges and financing terms pushed the price up over \$100 from the base.

My Testimonial Statement

It is true that the price in question, which for me was \$458 base, over about three years, obtains you more than 30 volumes of encyclopedia. The package called for a copy of the Britannica Atlas, a three-volume set of the super-long Webster's Third International Dictionary, and 100 drafts on the Britannica Reference Service. The Atlas is a very good one, although my own personal prejudice prefers maps by political entities to the EB practice, now common, of maps on a regional basis. (My copy was missing a signature of 16 pages) The dictionary is obviously very detailed, and includes considerable etymology, as well

as a seven-language cross-reference dictionary (English, French, German, Italian, Spanish, Swedish, and Yiddish).

The Reference Service is an odd come-on: EB promises to compile 100 bibliographical reference lists over a period of 10 years (which turns out to mean up to 10 a year) upon request, sending standard lists for up to 10,000 topics pre-prepared (for which a list is sent), and preparing from scratch lists on new subjects as requested. I have not yet tried any of the latter, but the ready-made lists I acquired, which were mostly on Shakespearian topics, were not free of factual errors in the narrative sections and neither extensive nor commicative in the specific bibliographic references cited. My old colleague millikan jayhat troll commented fairly that these lists are really only of much use to persons who know nothing about a subject and need to get a start somewhere. (The service also costs 25 cents per subject, which I don't recall being told about in advance.)

Submitted in 2000uplicate

I also received, strictly as a don't-go-away-mad bonus during the bureaucratic hassles and not as part of a regular package, a

Ever Wonder What It Means?

The Legend of Gunga T

by James Llewellyn

On Christmas day, 1915, a small group of men carefully climbed up on the the satellite peaks of Mt. Wilson. They took with them several picks and shovels, and their lunches. Their objective was Heniger's flat, just five miles up the Mt. Wilson Toll Road, on the creast of a small peak overlooking Pasadena. They quickly began clearing the ground. It was slow going and they had not finished by night-fall. It was mutually agreed that they all return the next weekend.

They did return the next Saturday, and then again until the job was finished. In all it took four weekends to complete their task. When it was done Professors W. Howard Clapp (Eng) and Harold Clark van Buskirk (Ma) and the eight seniors they had led could be proud of their handiwork: creating the "Big T" on the mountain.

Thus started an ambitious tradition, of preserving the "T" as a symbol of the institute. This lofty task was of course given to the lowly freshmen, who had to go out each year, sometime in October, and clear any new growth on the "T".

Mad T-Party

A typical "T-Party" as they were called went like this: the freshmen would get up rather early that day, and drive over to the base of Mount Wilson. There they would start the climb up the Toll Road (or more direct routes if they were braver) carrying their lunches and any tools they could find.

An observer would watch the progress of the clearing from the top of Throop, and would telephone any instructions to the base of the mountain. These were then relayed up by various signalling methods.

20-volume set of Annals of America, which is a real prize: collections of original documents, many by important personages but some by unknowns, spread in roughly continuous distribution over the years from 1493 to 1968—a treasure trove for dedicated students of United States history. (The Britannica itself, by the way, is more up-to-date than 1968; it includes, for instance, Agnew's resignation.)

The terms of the purchase agreement for the deal in which I participated, a student package, included monthly payments of \$15.50, with a provision for non-payment of financing charges for the number of months early in which full payment is completed, and a testimonial statement about the quality of the product, to be requested by EB at some future date (mine hasn't been yet) and to become their property. The reader will have gathered that non-zero levels of commercialism are to be found in the encyclopedia game, and must decide for himself whether an encyclopedia is worth the sock in the budget. As encyclopedias go, however, among the ones with which I am familiar, this one ranks fairly high.

Lunch was eaten in Henraco Meadow, while on the way down a Y car would meet them with more food, usually bananas and doughnuts.

This "T-Party" was a tradition from 1921 to 1934, with each class leaving a stone marker to remind people of its presence. The record clearing time, by the way, was set in 1924 when the entire "T" was cleared in only forty minutes.

In 1934 some Pasadena residents complained that the "T" was an unsightly blemish of the landscape of their hills. The traditional "T-Party" had to be cancelled.

Seniors Take Over

But all was not lost, as the seniors took over the cause. On the day after graduation, a group of them would clear the "T." Not being students, the administration could not stop them.

Even this did not save the "T," as apathy struck and the seniors stopped clearing it in 1938.

The Forest Service has since ruled out any present day

clearing of the "T," because of possible erosion damage done during a heavy rain.

The traces of this tradition still remain with us. Our year-book is called *The Big T*, for instance. In 1921 it changed to this from the *Orange and White* in order to avoid confusion with the University of California's *Blue and Gold* and other similar names for local high school yearbooks.

So the "T" remains with us, still faintly visible on the mountain, and who's to quibble over the fact that it stands for Throop and not Tech?

Letters

Continued from Page Two

It is time for change! It is time to replace an obsolete, primitive, and inhuman moral code with something based on the greater powers of human cognition. It is time to purge all words denying the basic dignity of every human—indeed every living creature. Towards a better world!

-Gul Agha

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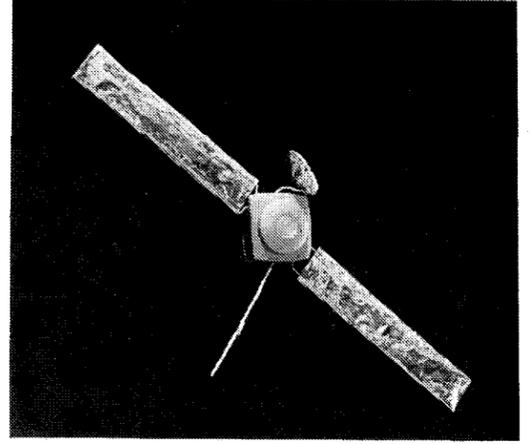
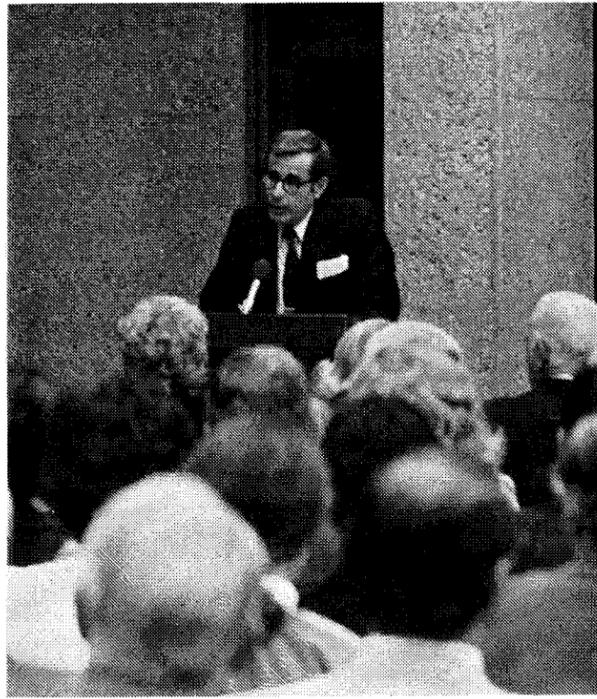
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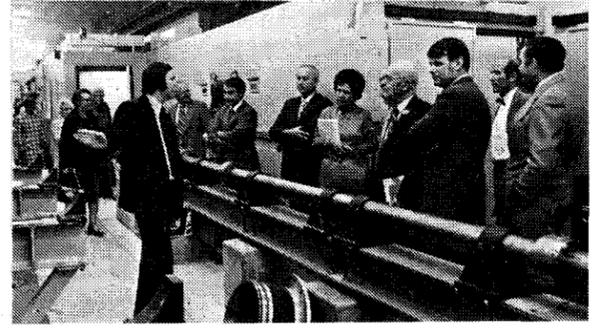
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Mudd Dedication



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(Other) Dr. Brown Made ICSU Head

Dr. Harrison Brown, professor of geochemistry and of science and government at the California Institute of Technology, has been elected president of the International Council of Scientific Unions (ICSU).

Dr. Brown, who was vice-president, succeeds Prof. Jean Coulomb of France as head of this federation of scientific unions covering 17 fields and national scientific institutions in 60 countries. The election was at a meeting in Istanbul, Turkey.

ICSU is dedicated to encouraging international scientific cooperation, a field in which Dr. Brown has keen interest. For the past 12 years he has served as foreign secretary of the National Academy of Sciences of the United States.

In recent years Dr. Brown has been pursuing research in the fields of sciences and public policy, and population and environmental problems. He is the author or co-author of several books, non-fiction and fiction.

He is the first American to head ICSU since 1955. The council was formed in 1931 and its first president was George Ellery Hale, one of the three founders of modern Caltech and the man who founded the Mt. Wilson and Palomar observatories.

Dedication

Continued from Page One possible," and he was. Nonetheless, he eloquently thanked all those who made South Mudd possible, saying that their gifts would benefit not only Caltech but all of mankind.

Dr. Brown returned to the rostrum to present plaques of commemoration to representatives of each of the donors, including the Mudds, the Lindhursts, the McCollums, and Henry Salvatore. Finally, Dr. Avery concluded the dedication and invited all those present to tour the new home of Geophysics and Planetary Science at Caltech.

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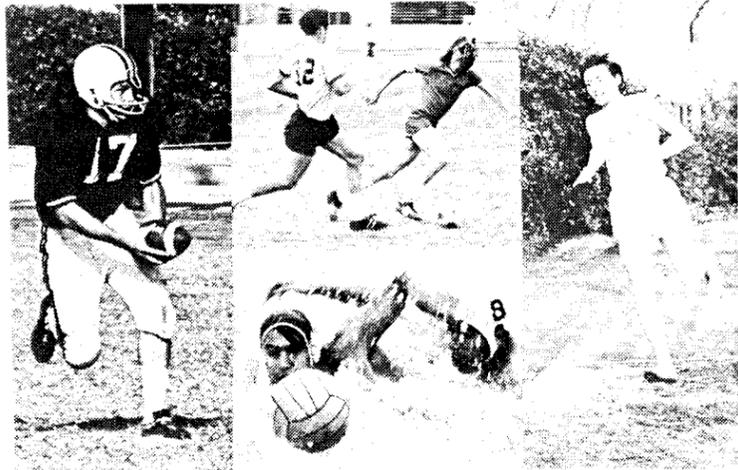
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Page Eight

Friday, November 1, 1974

Cross Country

Beavers Split Meet

by Dave Sivertsen

Caltech's cross-country team travelled to Redlands last Saturday to participate in a three way dual against Redlands University and Whittier. This was part of a large invitational, with many age-group races and women's races. Unaccustomed to the totally flat course, Caltech lost what was expected to be a close race to Redlands, 21-34.

A contributing factor to the surprise was a new runner for Redlands, who placed well. Caltech did manage to down Whittier, 15-46 on the 4.3 mile course. First place went to Spotts of Redlands in a time of

21:31.8. Caltech's varsity stand-out, Greg Griffin finished second in 22 minutes flat, an average of 5:07 per mile.

Next for Caltech was sophomore Rick Debus, who put on a strong sprint at the finish for fifth in a time of 22:52. Close together as usual, Joe Arpaia, Steve Kellogg, and Jeff Poulin placed eighth, ninth, and tenth in times of 23:32, 23:33, and 23:43. Rounding out Tech's top seven were Ray Jean (13th) and Larry Bridges (15th). This 1-1 result, along with last week's easy victory over Chapman College, put Caltech's record at 5-4.

At Least They're Consistent

Varsity Poloists Lose to Grads

by David Angulo and Tim Groat

Despite the curtailed Homecoming schedule, last Saturday's water polo game with the alumni provided plenty of excitement for the visiting graduates. Strong offensive attacks marked the showdown between past and present Caltech tank squads.

The alumni did most of the scoring in the early part of the game. They carried an impressive eight-to-three lead into the final quarter.

Russ Desiderio and Howard Bubb provided the drive for the varsity's comeback in the final period. By the time that the clock called an end to their scoring spree, they had tied the score at eight all.

The alumni picked up the pace in the overtime. Both teams hit the goals, and at the end of the fourteen minutes the score had been transformed to an eleven-point tie, forcing the game into sudden death. The alumni finally put the game away with a shot to the corner of the Tech goal, prolonging the varsity's losing streak.

The water polo team lost the game against Claremont-Harvey Mudd Wednesday, bringing their conference record to 0-3.

The game Wednesday began as poorly as it ended. During the first quarter, the Tech team was defending the goal on the deep

end of the pool. To the dismay of their opponents, the Mudd swimmers were able to keep the ball on the deep end for the largest part of the quarter, scoring seven "easy" goals.

The second quarter was almost a mirror image of the first. With Mudd now defending the deep end, the ball still stubbornly remained in range of a Caltech goal. However, the symmetry was spoiled. Due to a lack of shooting, the home team was only able to score on one shot by Howie Bubb.

After a lengthy discussion of employable strategem, the teams returned to the pool. With a score of 7-1 facing them, the Tech tankmen became a little more lively. Mudd noticed this and started fouling more often with the result of losing their goalie for 30 seconds. It looked like the home team would score but no one even took a shot.

Finally the fourth quarter started. The Tech team was facing a hopeless score of 13-1 which was soon increased to 15-1. Caltech then started to score, but it was too late to save the game. One of the few shots by Tech would have been a goal except for the superb save by Mudd's goalie, Dan Moneta. Moneta jumped to the top of the net and hit the ball directly beneath him. However, his frantic efforts proved to be worthless

when Howie Bubb simply picked up the ball and stuffed it into the net to score. Mudd retaliated with a score during the period of confusion over a foul, making the score 16-2.

Moneta lost one more easy save before the game ended. The shot by Russ Desiderio was high into the net. Moneta caught the ball and then dropped it into his own goal. The scoring was completed by Desiderio when Moneta was outmaneuvered.

Watching the varsity team lose 16-4 angered the JV team and their scrimmage of two quarters against Mudd's youngsters was more ferocious. Unfortunately, their ferocity did not pay off and they lost 11-0.

This week's fine performance brings hope of better things to come in the remaining league schedule. If the offense maintains the pace they set last Saturday and the defense can contain the Whittier team, they stand a good chance of breaking their season-long losing streak.

Tomorrow's game will be played at Whittier at 10 in the morning. The team returns to Tech for Wednesday afternoon's meeting with Redlands.

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Caltech CDC

Continued from Page One

The Child Development Center is an attractively painted building just over a block from Caltech. Located at 293 S. Chester, it is convenient as well as extensive. It boasts a garden, alongside of which is a play area with such things as a cargo net to climb on, a sand area, a 40 foot asphalt apron to play on and, of course, numerous tables and chairs with "many things doing" on them.

Originally supported by the James Gardiner Foundation, the Center is now primarily supported by the Caltech Womens' Club, as well as from such things as annual membership drives and the impending art auction. It is run by a committee of people devoted to the Center, and chaired by Mrs. Yvonne Goddard. It has fulltime directors and teachers, as well as volunteers from surrounding colleges. It is basically non-profit, and committees for each year are chosen by the previous year's committee. There are spaces for 27 full-time children and a total of 27 attend. It was rated at the top of the list of child development centers in a recent poll by USC.

Return of Sports Menu

Friday, November 1			
2:00 p.m.	Football	La Verne	Away
Saturday, October 2			
10:00 a.m.	Soccer	Whittier	Home
	Water Polo	Whittier	Away
11:00 a.m.	Cross Country	SCIAC Finals	Oxy
Wednesday, October 6			
4:00 p.m.	Water Polo	Redlands	Home
7:30 p.m.	Soccer	Pomona-Pitzer	Away

An added attraction that went into effect last year was the addition of scholarship aid. Primarily intended to help graduate students, aid is given on the basis of need to students with children. A special committee has been organized to distribute these scholarships. As regarding admission to the Center, the director interviews each prospective applicant and decides on that basis. Priority is given to children requiring five-day, rather than three-day care.

So—if you ever need an unstructured environment for a child or two, the Child Development Center is worth looking into.

Third Wing

Continued from Page Five

NO vote would be a vote against pollution of the river. This measure is an excellent example of why truth in advertising should be made to apply to elections. In any case, proponents of 17 have made one of the most intelligent statements of the entire campaign: "Suggesting the Stanislaus is only 5% of the available rivers is like saying Yosemite is only 5% of the Sierra Nevadas." Life has to be more than just a matter of percentages and numbers of tons of cement. It would be a real shame if the Army Corps of Engineers made movies such as *Silent Running* into documentaries.

Last but not least, to coin a phrase, is the special Southern California Rapid Transit District

Dabney Lounge Space Warps

This Saturday night at 7:30, there will be an Alien Space game in Dabney Hall Lounge, unless it happens to be in Page House or somewhere else (the game, not the Lounge). For further details, contact Bob Cowan, 109 Page.

Proposition A. This would allow the expansion of the RTD system of buses, as well as the development of new mass-transit networks covering the entire Los Angeles basin. The idea is that if the rapid transit system is efficient enough, people may ride it in large enough quantities to allow people to breathe the air again. Proposition A is supported by the Mayor of Los Angeles, the Chairman of the County Board of Supervisors, the President of the L.A. League of Women Voters, and the President of Pepperdine University. It is opposed by the Chairman of the Libertarian Alternative of Los Angeles on the grounds that it involves taxes and that there are no free-enterprise competitors to the RTD. That says something about the Libertarians, but I'm just not sure what. A sales tax seems to be a pretty small price

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