

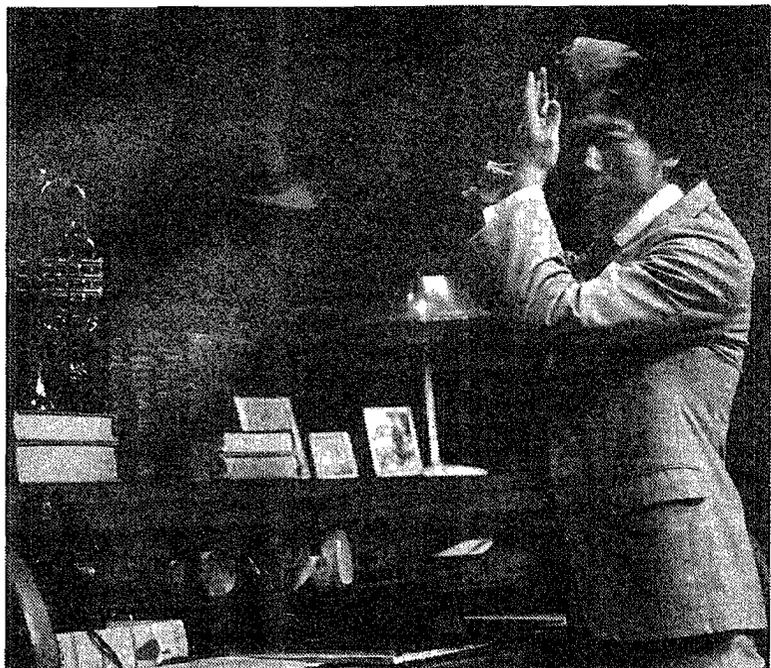
Wasserburg 'Watsons'

By Joel Rubinstein

Have you ever wondered why isotopic abundances are so uniform from sample to sample? Gerald J. Wasserburg, Professor of Geology and Geophysics, spent the better part of his Earnest C. Watson lecture Wednesday talking about exceptions to this uniformity. In the solar system, which has had very little contact with the rest of the galaxy since it was formed 4.55 billion years ago, sample to sample variations do occur. When a meteorite strikes earth, geologists get excited the isotopic abundances in the meteorite provide clues about the origin of the solar system. The existence of isotopic abundance variations shows that the solar system was not thoroughly mixed when it was formed.

Meteorite isotopic abundances depend on the proportions of different stellar sources which coalesce to form the substance from which the meteorite was ejected. The abundances provide major clues to the age of the solar system, because of known exponential decay rates. The tone of the lecture was light and non-mathematical. Wasserburg gave several amusing anecdotes including one about his hurried attempt to scrape together cash for a trip to Mexico when he heard that a meteorite had landed there.

The next Watson Lecture will be Wednesday, March 29 at 8pm. Dr. William A. Fowler will speak on "The Case of the Missing Solar Neutrinos." The Watson Lectures are free and are open to the public.



Fiorello a Success

By Joel Rubinstein

The ASCIT Musical, *Fiorello* had four performances last weekend. The musical tells the romantic tale of Fiorello H. LaGuardia, the Mayor of New York from 1934 to 1945. Young-il Choo played Fiorello, a New York lawyer with a strong sense of social justice. Seizing the issues of unfair working conditions in the garment industry, he offers to be Republican candidate for congress in his district. The Republican politicians always have great difficulty finding someone to oppose the ruling Tammany Hall Democrats, so they accept his offer and nominate him.

He wins and goes to Washington, where he makes a speech in Congress advocating U. S. involvement in World War I.

He resigns from Congress and enlists in the army. At his farewell party, he promises Thea Almerigatti, (Jeannine Wuts), leader of the garment workers, that he will win the war and bring the key to the city of Trieste. The war is shown by a newsreel.

Continued on Page Eight

Not Worth Scalper Prices

King Tut Comes to L.A.

By McQ

Though Tutmania is just beginning to sweep the city, the *Tech* has already been behind the scenes and is once again ready to lay the facts on you. First and foremost, the exhibit is *not* worth the outrageous scalping prices one now has to pay to get in. Yes, it is quite probably the best collection of Egyptian antiquities which will tour this country for several decades to come, but the prices being kicked around for tickets these days are absolutely absurd (\$35 each). The Los Angeles County Museum of Art's idea to issue tickets in advance was laudable for avoiding the lengthy lines which have attended the exhibit in other cities, but its execution was incompetent. The tickets have fallen into the hands of shysters and opportunists; deal with them however you wish.

The actual exhibit consists of 55 objects found in the tomb of Tutankhamun, 22 of which have never before left Egypt.

The works of art in the exhibition were chosen not only for their variety of subject matter, material and sheer aesthetic beauty, but also to give an accurate image of the contents of the four rooms in which they were found by British archaeologist Howard Carter. The sequence in which visitors will enter the rooms of the exhibit has been changed from the order in which Carter excavated them. Visitors proceed from the antechamber to the

Continued on Page Four

Tech Takes Third in Putnam

The Caltech Math team took third place in this year's Putnam Math contest. The Tech team was beat out by Washington University and University of California at Davis. Freshmen Peter Shor scored in the second group of five (between sixth and tenth place), and won \$100.

The Caltech team consisted of senior Karl Heuer, who got honorable mention, freshman Peter Shor, and ex ASCIT President Bert Wells. Michael Chandler got honorable mention, although he wasn't on the Caltech team. For their third place, Caltech won \$300 (traditionally used to support the Eric Temple Bell Undergraduate Mathematics Research Prize and the Morgan Ward Prize) and each team member won \$50.

The winning team from Washington University consisted of George Gilbert, Phillip T. Harrington, and Tim J. Steger. Their team won \$500 and they each won \$100.

The second place team consisted of Daniel and David Knierim, and Stephen R. Peck.

They won \$75 and UC Davis won \$400.

The fourth place team was Princeton, and M. I. T. took fifth place. Case Western Reserve, Harvard Univ., Pomona College, the University of Waterloo, and Yale Univ. took honorable mention.

Caltech's poor showing is in sharp contrast with the past. Tech has won it the last two years and five times in the last six years.

Numerical scores are not yet in for this year. But last year Karl Heuer received a 46 which was 20th in the country and Commander Bert got a 52, which netted him twelfth place.

The test was given last Dec 3rd and consisted of twelve difficult math questions divided into two groups of six. Three hours were allotted for each group. A maximum of ten points is possible on each question, giving a total possible of 120. To give you an idea of the difficulty, the most common score is zero and the mean is score is two.



The Gold Mask. Tutankhamun's funeral mask was placed directly over the bandaged face of the mummy.

Photo by Al Kellner

Equalize Credit

Have you ever had the experience of signing up for a "9 unit class, then found yourself spending ten or fifteen or more hours per week on it? Or, have you worried about taking an extra class, then found out that it required nothing more than attendance, so you were getting much more credit than you deserve. Well, if you are like most people I talked to, both experiences are common.

Of course, I'm speaking of the problems of under and over united classes. According to this year's TQFR, the faculty has gone on record opposing misunited classes. However, looking also looking through the TQFR, it is apparent that there are still many over and under united classes. Those courses which are mis-united should be examined, and either be re-united or have some major changes made in content and grading requirements. Although much progress has been made (compare this year's TQFR with last year's) there are still many classes needing review. Physics labs and the Chemical Engineering Department appear to be the worst underunited areas. Social science classes appear to be the worst overunited (again judging from the TQFR, despite letters to the contrary).

A committee should be formed to reevaluate these misunited classes. It would be a simple matter to go through and reunite those classes needing change. If a new committee can not be formed, then the Academic Honors and Standards Committee should do it. Admittedly there may be special circumstances for a class to be misunited, but in most cases there is no reason other than neglect, or occasionally a professor thinking his special class is so important as to merit extra work, despite what the institute says.

And, while the committee is at it, how about making Lit 15 (journalism) a six or nine unit class (and eighteen for Tech editor).

—Spencer Klein



Make Food Service Optional

There is theoretically only one rule at Caltech concerning student life, namely the honor system. In contrast to many schools which restrict student possession of cars, or the hours when students of one sex can be in rooms of the other, Caltech is very liberal. There is, however, one rule besides the honor system: *Students who live in one of the seven student houses are required to be on the board contract, unless they have religious or medical excuses.* There are two justifications I have heard for this rule. First, the house members feel that eating dinners together with food served by waiters contributes to house spirit. Second, the food service insists on this policy, because Caltech has a small student population, and a reduction in the number of students served has a much smaller corresponding reduction in total costs, hence an increase in average costs. I claim that neither argument is compelling enough to affront the rights of students who do not wish to be on the board contract.

The first argument fails as follows: if nearly all members of a house really feel that the waited dinner is important to house spirit, then they will remain on board contract anyway, and there is no need to make it mandatory. If a substantial number of house members find the house spirit effect of waited dinners not worth the cost, then as a significant minority (or majority) they have a democratic right to

be free from the tyranny of the rest. It might be argued that there is a free rider problem that if board contract were optional, although every student may feel that the waited dinner is good for house spirit, each student has a dominant strategy not to be on board contract, because his own contribution to house spirit by joining in waited dinners is very small. This argument neglects the fact that the house spirit effect of the waited dinner is a selective incentive open only to those students who eat the waited dinner, so all students who like the house spirit effect of the waited dinner will choose to be on board contract.

The second argument is equally invalid. Naturally the food service company insists on universal participation—it's more profitable. But food service is not a public good, and therefore should be paid for by only those who want it. If optional participation costs more per capita, this is a small sacrifice for the cause of freedom.

Whenever a regulation insulates a firm from feedback, that firm has no incentive to change. As long as students are required to be on board contract, food will remain expensive and poor. If students could indicate their approval (or disapproval) of the food by staying (or not staying) on board contract, then food service would always be aware of its popularity, and would have a strong incentive to cut costs and improve the quality of food. Now I can hear in my mind food service saying "NO!

All it will do is increase costs and create confusion, or drive us out of business!" But then, American Airlines has said the same thing about deregulation of airlines, yet recent events in the airline industry indicate that airlines can indeed find ways to cut costs without disrupting service or going out of business. Just as airlines are beginning to find ways to reduce costs, food service will find ways of improving food, if students are given the alternative of not being on board contract.

There is one other major reason food service should be optional. Some students are satisfied with the food that is offered: a typical American meat-and-starch-centered [and very little meat—Ed.] diet, frozen (not fresh) vegetables, often badly cooked, and foods laced with preservatives and other chemical adulterants. But there are students with different preferences. Unless board contract is optional, students with food preferences different from the food service menu have to either eat foods they don't want or pay extra somewhere else for their particular desires. Foreign students in particular are likely to prefer a different diet to the one offered by food service. It is absurd to force them to eat the "American" way.

Another point is that some students get off with the medical excuse that food service food makes them sick. I suspect that practically all students can make this claim at one time or another. It is absurd that only those students who go through the rigamarole of having their doctor write a note to this effect should be allowed to avoid board contract. Most students are far too busy to go to their doctor (who is probably 2000 miles away) for such things.

Students who eat more than two meals a day (as nearly all Americans do) are required to pay for their third meals out of their own pockets, in addition to board contract cost. But their total food consumption is probably no greater than the rest. So those who drink orange juice in the morning are subsidizing those who skip breakfast.

I have an alternative that would provide food service even more feedback than making board contract optional. Except for occasional (twice weekly) waited dinners, make the entire operation cafeteria style pay-as-you-go. There is no fast way of letting food service know what foods are liked and what are not. The occasional waited dinners should satisfy house spirit lovers, while food service would have the maximum incentive to provide good food at low cost. Students could be given account numbers and because of the honor system, each student could fill out a card at each meal with name, number, and cost. This would nullify the need for cashiers. Chandler shows us that it is economically feasible to have a cafeteria at Caltech. Why not expand on it? Even if this alternative is rejected, the other alternative of making board contract optional is a worthy compromise.

The question is not "Should all students be required to support a system that contributes to house spirit?" The question is "Should any exceptions be made to the honor system being the only restriction of student life?"

—Joel Rubinstein

Stickles by Baskir



Eliminate Tracks

Continued from Page One
thing else for that matter. But, as he said last year, he doesn't want to stuff his ideas down anyone's throat. "I just tell them the facts and hope they come to the same conclusions I do." Fair enough, but if that is the case, why is there a sign on his desk that says "Be Reasonable, Do It My Way"?

"Caltech should have two main goals. One is the education of young scientists and the other is basic fundamental research." This is certainly no radical theory of education. He continued: "Physics is not an asexual thing. The laws of physics may be objective but the approaches of individual scientists are not. It is the approach which is the important thing."

Of course, the approach. The education of young scientists is not new, but his approach to it is. Or, rather, it is so old, it is new. "I think that Physics 1 and 2 should be taught on a more sophisticated level. I was brought up on the Feynman course

concept [Vogt taught Ph2 for five years] and I think it is the best there is. You have to make a distinction between sophisticated and difficult. A sophisticated course does not have to be difficult. The better a teacher is, the easier the course will be." I interrupted him: "I remember that you once said last year that you didn't like the two track concept of physics. Why?"

He explained to me that he thought that Caltech students could handle more difficult courses than they were being offered, if they were made exciting enough. He went on to say that he had refused to abandon the Feynman course when he was teaching physics so physics was split into two levels. It was a sort of a compromise so that at least some of the students would take the Feynman course. Nevertheless, he doesn't like it. "We should treat all students

with the same respect for their intellect," he said.

"When I was teaching Ph2 (junior level physics) I had to put a lot of work into it. And demanded a lot of work out of my students. It was one of my most enjoyable activities. Most of the students who finished the course thought that it was a bitchy class, but most of them enjoyed it and appreciated it later on." This is one facet of Vogt. He is a tough teacher but he puts as much work into class as he demands of students.

Continued on Page Three

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More Vogt

Continued from Page Two

making it. And he is completely dedicated to physics. One student who knows Vogt told me that he is too tied up with physics. "He doesn't think about anything else." When I protested that Vogt was, after all, faculty chairman, I was told that I just didn't know him well enough.

That may be true, but you can't help but get the feeling that he cares more about the people he is teaching the physics than the physics itself. He insists that teaching is the most important part of Caltech. But, a moment later, he will refuse to say that research is any less important.

The division chairman is responsible for more than teaching, though. The Physics, Math, and Astronomy Division has lost many members recently, and new ones must be found. "The problem is that we have lost some of the most important members of our faculty," he says. He goes on to say that finding replacements is more difficult now because more care must be taken to comply with federal discrimination laws. "The law must be followed. We must pursue it vigorously."

Vogt also believes that Caltech must "transmit to the outside world what we are doing." He claims that usually when we can get a professor together with a potential donor, we can often get some money. "The problem," he says, "is getting the two to meet each other." Among other things, he would like to see Caltech raise some money for an astronomy building.

"I shouldn't be talking to you," he tells me. "I have to get the material for this site visit together." Even so, he keeps me for a quarter hour longer. It is clear he likes talking to students, even if he doesn't have that much time for it. It is hard to say what he will do as chairman, but I leave knowing that he will certainly do something worth talking (or writing) about. Just as I am about to walk out the door he says as much. "I will get lots of input before I shoot my mouth off," he says. "But you can be sure that I will shoot my mouth off."

All the News That Fits

Troll Music

Two new music courses for next term will be taught by Harihar Rao.

MU 101, sec 1: Musical Cultures of the world- Survey course of music and dances of nonwestern world with live performances, films and tapes. Th 7:30, 25 Baxter.

MU 101, sec 2: Rhythmic Complexes- Exploring simple to complex rhythms in various musics using the Tala system of India. Also, instruction in playing hand drums. M7:30, 25 Baxter.

More Letter Jackets

Lettermen must still pay their \$26 deposits for their jackets before the jackets will be ordered. Also, second year lettermen who ordered jackets as first year lettermen are now eligible for a 50% refund. Come see the ASCIT Athlmen in 142 Page.

All Degree Candidates

The following companies will be on campus to interview all degree candidates during the period Mar 6 to Mar 10:

Mar 6: Burroughs, Intel, California Dept. of Transportation, Exxon.

Mar 7: Bunker-Ramo, Xerox, Cummins Engine Co., Exxon, Occidental Research.

Mar 8: Four Phase Systems, Signetics, Pratt & Whitney, Orincon.

Mar 9: For Aerospace & Communications Group (Western Development Lab.), Tymshare, ITT, LSI Systems Support Center.

Mar 10: Garrett AiResearch, Zilog, U. S. Gypsum Co., Science Applications, Rocketdyne.

Signups for interview may be made in the Placement Office, Room 8 Dabney.

Ray Bradbury On Mars

The Caltech Y is sponsoring an outing to see the performance of Ray Bradbury's *Martian Chronicles*. There are 25 seats available at a cost of \$2 (transportation included). The date is Mar. 31, the first Friday in third term. Sign-up in the Y office.

Take an Office

Persons interested in being members of the following appointive student offices and committees should sign up on the nomination lists posted on Flora's door in Winnett:

- Athletic Committee
- Big T Editor
- Big T Business Manager.
- Coffeehouse Manager
- Educational Policies Committee
- Election Chairman
- Little T Editor
- Little T Business Manager
- Publications Darkroom Chairman
- Social Committee
- Totem Editor
- Gameroom Chairman
- Student Darkroom Chairman
- Gameroom Chairman and Student Darkroom Chairman are open to any undergraduate. Other positions are open only to ASCIT members. For more info, consult you little t or call Larry Fried rich at X2172.

ASCIT Budget

The ASCIT BOD budget meeting for the year 1978-79 will be held Monday, March 6 at 7:30 pm in Winnett Lounge. Anyone who wants to be included in this year's budget or who just wants to add to the confusion should attend.

Where Have All

The Black Holes Gone ?

Next Wednesday, March 8, at 12 noon in Clubroom 1, Dr. Roger D. Blanchford, Assistant Professor of Theoretical Physics, will give an UPDATE noon discussion presentation on the question, "Where have all the black holes gone?" The Caltech Y is sponsoring the program and encourages you to bring your lunch and discuss this intriguing problem with a real live professor.

Check ID's

The Millikan Library Administration tries to keep the library free from outside users after 5 pm and on weekends, so that Caltech students can study in the limited space available. Library passes are issued only to a relatively small select number of special users.

We find that some outsiders without library passes come into Millikan Library before 5 pm, before screen users by the library staff has begun, and then stay after 5pm. The library staff will be making spot checks of people in the building after 5 pm and on weekends. If you are asked for your Caltech I. D., your cooperatiion in showing it will be appreciated.

Get Some Money

The financial aid deadline for the 1978-79 academic year is Monday, April 17. Pick up your financial aid application in the Financial Aid Office, 208 Dabney. If you have any questions regarding the form, please do not hesitate to see either Ursula Hyman-Kelly or Sandra Boyd.

Atkins New Trustee

Victor K. Atkins, President of Doran Co. of Oakland, has been elected to the Caltech Board of Trustees .

Mr. Atkins became President of Doran Co. in 1951 after four years with Pacific Car and Foundry Co. He recieved a B. S. at the U. S. Naval Academy in 1942. During World War II he served in the submarine service and was decorated with the Silver Star. In 1947 he recieved an M' S' from Massachusetts Institute of Technology.

He is a member of the California Chamber of Commerce, the Oakland Chamber of Commerce, the Society of Naval Architects and Marine Engineers, and the Marine Exchange of San Francisco.

His appointment was announced by R. Stanton Avery, Chairman of the Board.

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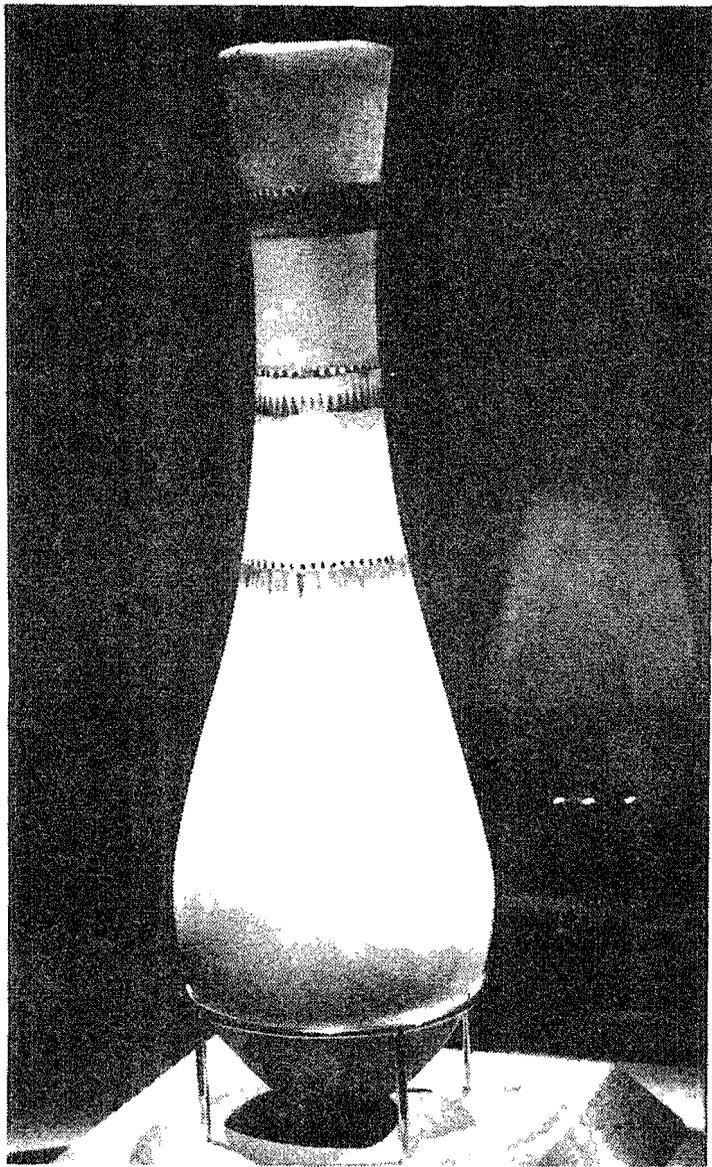
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Photos by:
Al Kellner



Alabaster Flask. The mosaics inset around the neck represent floral garlands.



The Sun God on a Lotus. This finely carved wooden head has the features of Tut and identifies him with the sun god.

Exhibit Good But Not Worth Waiting

Continued from Page One

annex, then through the treasury and finally to the burial chamber itself. Photomurals of photographs taken at the site by Metropolitan Museum of Art photographer Harry Burton have been placed throughout the room to recall the painstaking and expert work required to remove the thousands of priceless and fragile treasures from the chambers, though some of them seem a bit pointless. The photomurals have been enhanced by quotes from Carter's diary which are just long enough to arouse interest without answering questions. They are also poorly lit along the wall, making several of them difficult to read.

Tut Alive

Tutankhamun reigned during the 18th Dynasty (1570-1293 B.C.) one of the most glorious periods in Egypt's history. Centuries before, in 3100 B.C., Egypt had become the first large state in history to be unified under a single ruler. The Sphinx and the Great Pyramid of Giza (ca. 2500 B.C.) were already ancient monuments by the beginning of the 18th Dynasty, a period of tremendous expansion. Early in the dynasty, the great Pharaoh Thutmose III (1504-1450 B.C.) established an empire in Asia, thus involving

Egypt in close political and commercial contacts with foreign cultures, as well as fostering innovations in art and religion. By the time of Amenhotep III (1386-1349 B.C.), Egypt was enjoying the full fruits of its empire. Tributes were flowing in from occupied countries and peace was made with the country's major enemy, the Mitanni in Syria. Egypt's prosperity was evidenced by the construction of huge temples, colossal statues of the pharaohs and lavishly decorated tombs in the Theban necropolis.

Tutankhamun's life (ca. 1343-1325 B.C.) and reign (ca. 1334-1325 B.C.) are known only in fragmentary detail despite the quantity of material found in his tomb. His parentage is uncertain. Some authorities believe he was a son of the heretic king Akhenaton (1350-1334 B.C.) by a minor wife, not Nefertiti. Others believe he was a son of Akhenaton's father, Amenhotep III. In any case, his right to the Egyptian throne was secured through marriage to princess Ankhesenpaaton, the third daughter of Akhenaton and Nefertiti.

This period in Egyptian history was not only one of unequalled material riches, but

also a period of unprecedented internal upheaval. Akhenaton and Nefertiti had been fanatical devotees to a new faith, the worship of the sun god, Aton. They had built a new city of splendid temples dedicated to Aton at what is today El-Amarna, removing their court to the new site from the traditional capital at Thebes. At the time Tutankhamun became Pharaoh, at about the age of nine, the heretic reign of Akhenaton and Nefertiti had caused unrest and demoralization among the conservative and devout Egyptian people. The international situation was desperate as usual. It was obvious to the new pharaoh's advisors—his chief vizier, Ay, and his commander in chief, Haremhab, who largely governed the country—that a return to the old order was necessary for the country to recover from the chaos into which it had lapsed. Three years into his reign, Tutankhamun's court abandoned Amarna and his childhood religion, returned the capital to Thebes, reopened the temples and restored the country to the worship of the traditional gods, Amun in particular. Accordingly, the Atonist names of the royal couple were changed from Tutankhaton and Ankhesenpaaton to Tutankhamun and Ankhesenamun.



Dr. Ali El-Khouli. He is the Egyptian Antiquities Representative travelling with the collection.



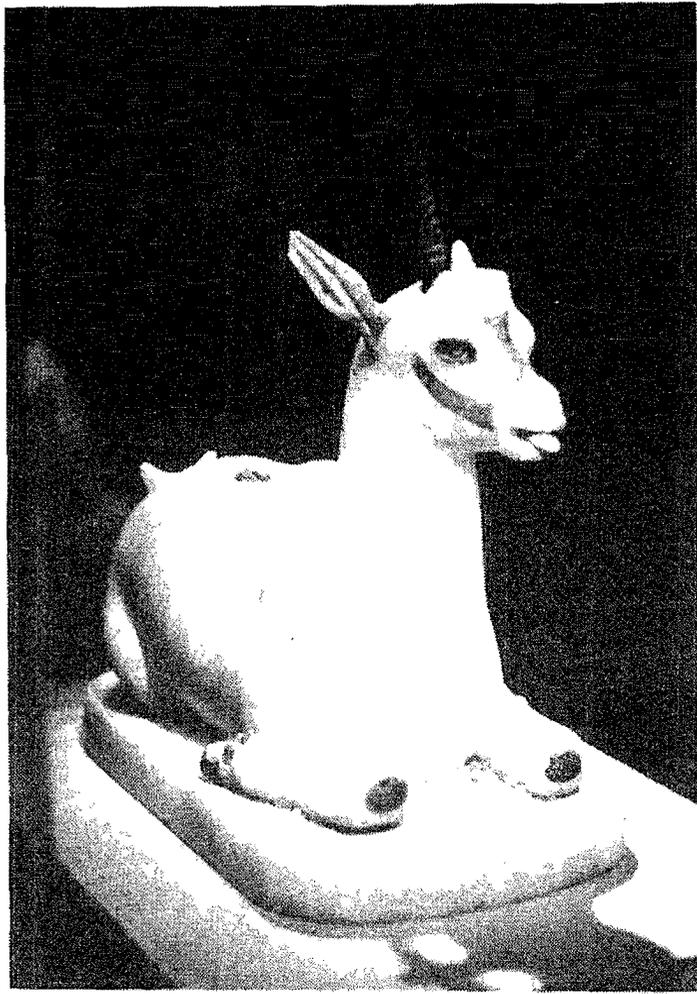
White Lotus Chalice. This alabaster chalice is in the form of a white lotus blossom.

Tutankhamun died suddenly in 1325 B.C. at about 18 years of age, of unknown causes. An autopsy recently performed on the mummy suggested he may have been bludgeoned to death. He was buried in a small tomb in the Valley of the Kings that had probably been prepared for his vizier, Ay.

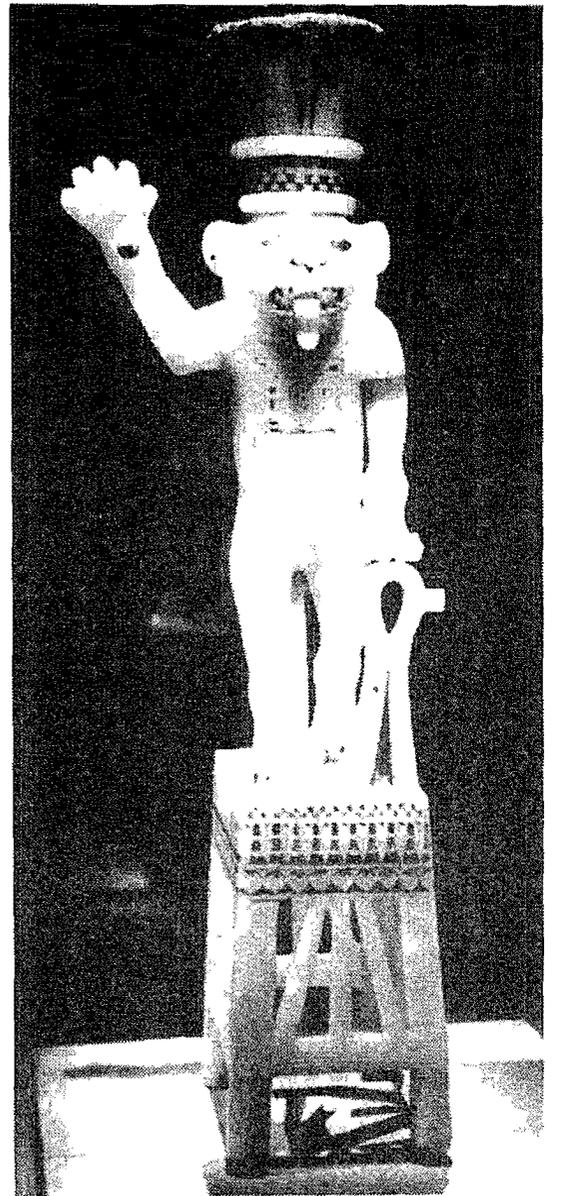
The Tomb

Hidden by its atypical location in the floor of the valley, and covered by mud and rock-slides and later by the debris from the construction of a royal tomb nearby, Tutankhamun's tomb escaped the attention, and ultimately the wholesale plundering, suffered by the other royal tombs in the Valley of the Kings. While these were being ransacked by centuries of tomb robbers, Tutankhamun's mummy lay undisturbed inside its sarcophagus. Most of his funerary treasures and personal possessions have survived virtually untouched, despite two abortive attempts to rob the tomb shortly after the burial.

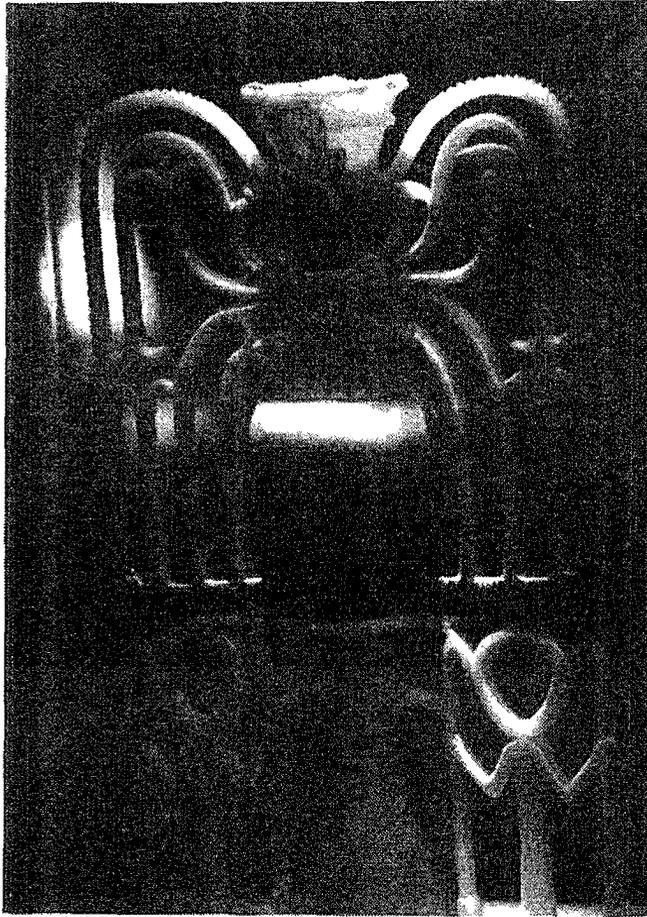
Considered by some as the most spectacular archaeological discovery of the twentieth century, the discovery of the tomb was made by the British archaeologist Howard Carter and his sponsor, the fifth Earl of Carnarvon, just as they were about to abandon what was proving to be a fruitless search for the tomb of Tutankhamun. Carter had long been convinced that Tutankhamun was buried in the Valley of the Kings, where the plundered tombs of other pharaohs of the Egyptian empire had been found. But six seasons and 200,000 tons of upturned sand and rubble had revealed no trace of the king's tomb. Carter convinced his sponsor to support a final two-month dig in an unexplored area in the valley, at the foot of the approach to the tomb of Ramesses VI. His faith



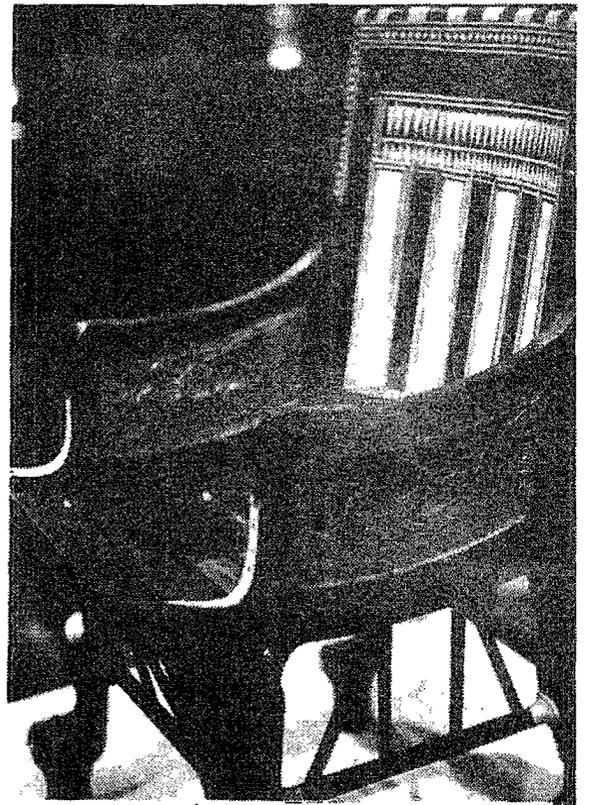
Ibex Vase. This alabaster vase was fitted with real ibex horns, only one of which remains.



Standing Lion Jar. The head and body of the lion are hollow. His chest bears the symbols of the king and queen.



Floral Unguent Vase. This long necked vase and stand are formed of only two blocks of alabaster.



Child's Chair. This twentyeight inch high chair is made of ebony inlaid with ivory and gold.

Tutankhamun the Harpooner. Tutankhamun, representing the god Horus, is about to harpoon a hippopotamus of Seth, god of evil.

and that of Carnarvon paid off: the long-dreamed-of discovery was made.

On November 26, 1922, Carter, with Lord Carnarvon at his side, made a small hole in the plastered entrance to the Antechamber and saw by the light of a flickering candle the treasures that had lain concealed there for more than 3000 years. Carnarvon, unable to stand the suspense, inquired anxiously, "Can you see anything?" Carter answered, "Yes, wonderful things."

The Display

Unfortunately, the viewer at LACMA is immediately blinded by the darkness. The lighting is subdued to the point of dimness while the objects are exhibited under spotlights, each to its own plexiglass case. The rooms are gaily painted in black and tan with matching dark rug. Once your eyes have adjusted, however, there is a feast to behold. The wall on your left is cut away through all the rooms, giving a clear view from the beginning of the exhibit to the end. All that will be in sight, though, are crowds of people. The first room, representing the antechamber, contains both some of the best and worst of the objects. I found the openwork buckle most interesting. It's made of sheet gold tinted red and portrays Tutankhamun in the traditional role of a warrior returning from battle. In front of his hariot are shackled Asiatic and Nubian captives while the vulture and winged cobra goddesses of Upper and Lower Egypt protect the king.

Also of note in the first chamber is the floral unguent vase; directly to your left after entering. The exploding alabaster lattice-work is an extraordinary feat of stone cutting. The vase and stand are formed of only two blocks of alabaster with the papyrus plant of Lower Egypt and the lotus of Upper Egypt tied around the neck to symbolize the unification of the two lands. The unguent it

contained was probably an ointment of either gum resins or oil fats used as perfumes and as religious ritual offerings.

The second room contains the devastating Lion Jar, which I would list as one of the outstanding pieces. The lion bears the cartouche of Tutankhamun and may symbolize the king; the heads of Asians and Africans projecting from the base symbolize the conquest of foreign lands. The whole jar has an air of coolness despite the red tones and, as is usual with these items, one shouldn't miss the rear for it seems the lion bears spiral galaxies on its shoulder blades.

A favorite of many in the third room is the goddess Selket statue. She is one of four goddesses who stood outside the gilded wooden shrine that housed the chest containing Tutankhamun's mummified internal organs, her outstretched arms spreading protection. But what I think the third room

really revolves around is the blue-capped statue of the god Ptah; principal god of Memphis, the original capital of Egypt, and the patron of artists and craftsmen. The carved wooden figure is coated with gesso and gilded, with some details in bronze and gold. The god is wrapped in a feather-patterned garment. His skull cap is made of blue faience while the eyes and eyebrows are inlaid with glass.

The jewelry is scattered throughout the rooms, with the best pieces in the passage between the second and third rooms. Be sure to check out the earrings with the hybrid birds; falcon wings and duck heads. The vulture collar is second only to the mask for the honor of being the most spectacular piece. The other truly notable bit of jewelry is the Pectoral with Solar and Lunar Emblems. This elaborate pectoral illustrates a fusion of two related symbols that were originally independent. In Egyptian art, the sun god, Ra

could be represented both as a scarab and as a falcon; here he is symbolized by a chalcedony scarab that serves as the body of a falcon with outstretched wings. It has the forelegs of a scarab and, at the back, falcon's legs. The piece is made of gold and inlaid with semi-precious stones.

Last and most magnificent is the funerary mask. Made of beaten and burnished gold, it was placed directly over the bandaged face of the mummy. It is lifesize and appears to be a likeness of the king, verifiable from the mummy itself. The eyebrows and eyelids are made of lapis lazuli; the eyes are of quartz and obsidian; the stripes in the royal headdress are of blue glass, as is the inlay of the plaited false

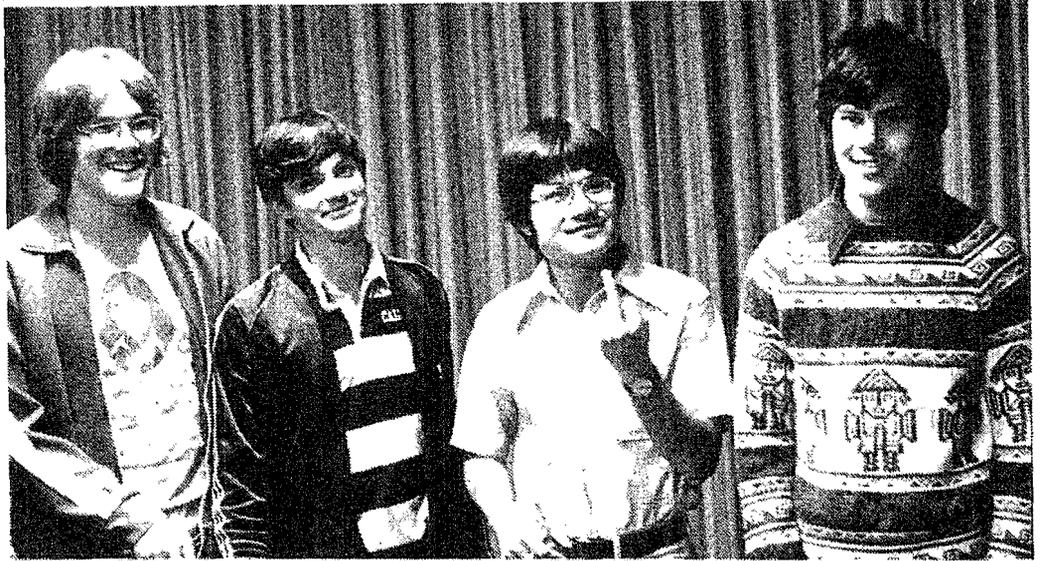
beard. The vulture and the cobra, side by side on the forehead, symbolize the king's sovereignty over Upper and Lower Egypt.

The last door on your right before you leave is the office of Dr. Ali El-Khouli, the Egyptian Antiquities Representative traveling with the collection. If he's in, be sure to ask him any questions you might have. He's a fascinating fellow and well-versed in Egyptian antiquities.

A special "Treasures of Tutankhamun" shop just outside the exhibit offers all the usual knick-knacks associated with museum exhibits. Net proceeds go to the Organization of Egyptian Antiquities. The exhibit runs through June 15, but admission is by ticket only.



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The Other Half of Your New ASCIT Heroes



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New Parking Lot
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Beckman Mall Hosts Festival

Orson Welles to be Shown

The Court of Man will serve as the exhibition grounds for the seventh annual Art Festival during the first weekend in March, for continuous entertainment, displays, performances, and good food, all being offered by the Pasadena Arts Council. Admission is free, parking is free, and everyone is welcome. The hours are from 10 am Saturday, March 4, and from 11 am until 4 pm Sunday, March 5.

There will be exhibits in Baxter Art Gallery, drama, films, and music in Beckman and Ramo Auditoriums and in Dabney Lounge.

This annual event is sponsored by the Pasadena Arts Council and is called "C.L.E.A.R. Days" (Creative Learning Exchange and Renewal).

This weekend, the Modern Folk Quartet (MFQ) is appearing

at the Ice House in Pasadena. Call 681-9942 for more information.

A concert of rare and beautiful music of the 12th through 18th centuries will be given by the Waverly Consort in Caltech's Beckman Auditorium on Saturday, March 4, at 8 pm. For ticket information, call 793-7043.

Jean-Philippe Collard, the brilliant 29 year old French piano virtuoso, will make his West Coast recital debut at Ambassador Auditorium in Pasadena on Saturday evening, March 4th at 8:30 pm.

His program for the Ambassador concert follows: *Valse Nobles et Sentimentales* by Ravel; *Etudes Symphoniques Op. 13* by Schumann; *Isle Joyeuse* by Debussy; and *Sonata No. 2 in B-flat minor, Op. 36* by Rachmaninoff. For more

information, call 577-5511.

Athens-born guitarist George Sakellariou, a student of Andres Segovia, will make his UCLA recital debut on Saturday, March 4 at 8:30 pm in Schoenberg Hall. Sakellariou's program will open with the *Introduction and Allegro, Opus 14* (Sor), and include the *Cello Suite No. 1, BWV 1007* (J.S. Bach), *Segoviana, Opus 366* (Milhaud), *Four South American Pieces* (Barrios), *Torre Bermeja, Opus 92, No. 12* (Albeniz), *Prelude No. 5 and Etude No. 11* (Villa-Lobos), *Minuet in D and Minuet in A* (Rameau), and Grandos' *Andaluzia and La Maja de Goya*. Call 825-2953 for information.

This Sunday, March 5 at 7:00 pm, the oratorio, *Saint Paul* by Felix Mendelssohn will be performed at Immanuel Presbyterian Church, 3300 Wilshire Boulevard in Los Angeles.

The Los Angeles Philharmonic Orchestra, under the baton of Sidney Harth, will give a concert this Sunday, March 5 at 2:30 pm in the Dorothy Chandler Pavilion of the Music Center. Aleksander Slobodyanik will solo in the Mendelssohn *Piano Concerto No. 1* and in Ravel's *Piano Concerto in D*. The

Cinemathech returns this week with a night of film by a true genius in the field, Orson Welles. *The Third Man* will be presented along with his most famous film and one of the greatest American films, *Citizen Kane*.

The first feature of the evening is *The Third Man*. Made in 1949, this film marks a turning point in attitudes towards film. The film convinced many people steeped in literary tradition that serious film exists. The film is decidedly different from any literary work. Although Welles is only credited with the job of acting, it is evident that he had more to do with it. The film is essentially visual in its presentation. The camera shots do much to raise questions of reality and illusion, life and death. For the student of film, this is a golden opportunity to see the real artform in action. For the average viewer, not only is this a very intriguing and compelling drama, but also one very fine mystery.

As for the second feature, not much needs to be said. How much does one need to say about a Babe Ruth or an Einstein other than, they're the greatest? Orson Welles wrote, directed, and starred in this cinematic masterpiece. *Citizen Kane* has been praised for almost every facet of filmmaking. Welles

was only 21 and fresh from his radio broadcast of *War of the Worlds*, when RKO offered him a carte blanche to make three films.

The photography is by Gregg Toland, famous for wide angle shots with pan focus. This allows both foreground and background to be in focus at the same time. The audio montage is magical in its effect of carrying the viewer into a mystery that we somehow know, we will never solve, but wish to be a part of just the same. For anyone who wants to see American cinema at its best, then this is the film to see.

Cinemathech films are shown Saturday night at 7:30 pm in Baxter Lecture Hall. Donation is only \$1 for ASCIT and GSC members, \$1.50 for the general public, and 75 cents for children under 14.

This week's ASCIT film is especially good, *Easy Rider*. The story is quite simple: two men riding their motorcycles through the south. The film has special meaning for anyone who can remember back to the days of the 60's. All the emotional drama of the era is deftly transmitted. The viewer will have moral decisions thrust upon him every minute. This is a film apathetic people of the 70's should be made to watch over and over again.

-Michael Kurilla

Othello Victimized

An old thing 'twas, but it expressed her fortune, and she died singing it. That song tonight will not go from my mind.

Othello IV, iii.

And thus was the National Shakespeare Company's production of *Othello* victimized by its own aural effects. The piped-in "mood music" swelled in all the wrong places and, by coming on in the midst of Othello's suicide, succeeded in reducing the tragedy of the Moor to soap opera. But perhaps this pales in comparison with Jonathan Lutz's *Othello*, who doesn't transmogrify and goes out very much the way he came in—proud and abrasive to the final curtain. Nancy Hammill's Desdemona was remarkably competent through most of the play, but she played the death scene as enthusiastically as a golfer who hasn't made the cut leads for the clubhouse. The front rows were conspicuously sparsely populated and the seating of the front-row-center very well into the production showed remarkable insensitivity to the part of all concerned. If that was truly "the first convenient pause in the program," it might as well have been a road race for all the notional involvement.

The high point of the whole evening was Marc Weishaus as

Iago. He gave an even performance and successfully negotiated the dangers of becoming cliché in several sections. Kirk Wolfinger, on the other hand, gave us a Roderigo who was an allegory of his own failure to mean; but this was excusable. The rest of the production was stifflingly competent; to the point of mediocrity. And that was it. As Othello charges the Venetian nobles at the end:

When you shall these unlucky deeds relate,
Speak of me as I am, nothing extenuate.

-McQ

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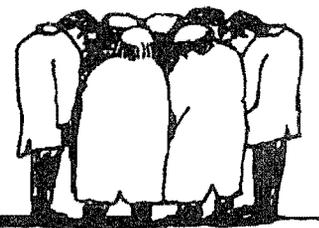
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Dutch Trio to Perform

An unusual concert of baroque music for recorders, baroque cello, and continuo, performed by the Dutch ensemble, Quadro Hotteterre, will be presented by the Coleman Chamber Music Association, on Sunday afternoon, March 5, at 3:30 pm in Caltech's Beckman Auditorium.

This distinguished group from Amsterdam consists of four young musicians specializing in 17th and 18th century music. The two recorder players, Kees Boeke and Walter van Hauwe, graduated from the Hague Conservatory, having studied

with Frans Bruggen, world famous recorder player. The harpsichordist, Bob van Asperen, and the brogue cellist Wouter M... are graduates of the Amsterdam Conservatory. These young artists founded the ensemble in 1968 while still students. They have made numerous recordings and have performed throughout Europe to great critical acclaim, not only with this group, but as soloists and with other ensembles.

The program for the March 5 concert at Beckman Auditorium will include works by Purcell, Locke, Bull, Frescobaldi, Vivaldi, Marin Marais and John Hilton. Tickets are available at all Ticketron and Mutual agencies and at the Caltech Ticket Office, 332 South Michigan Avenue in Pasadena. For further information call 793-7043.

Pianist to Perform

Continued from Page Seven

orchestra will also play Ravel's *Rapsodia Espagnole* and Mendelssohn's *Symphony No. 5*. For information, call 972-7211.

Mezzo-soprano Jan DeGaetani will join pianist Gilbert Kalish and Philip West who will play oboe, English horn and alto shawm, in the closing performance of UCLA's new Connoisseur Series on Sunday, March 5 at 8 pm in Schoenberg Hall.

Five Schubert songs--"Der Schmetterling," "Standchen," "Die Manner sind mechant!," "Die junge Nonne," and "Bei dir" will open the evening's performances. Wernich's four "Songs of Remembrance" will be followed by the "Sonata for Oboe and Piano" (Poulenc), "Fetes GalantesII" (Debussy) and the 13th century "Las Cantigas de Santa Maria" from the Court of Alfonso X, numbers 1, 158, 318, 7, 117, 10 and 166. Charles Ives' songs, "The Housatonic at Stockbridge," "Memories," "The Cage," "Two Little Flowers," "Serenity," and "The Circus Band" close the program. Call 825-2953 for information.

On Monday, March 6, at 8 pm in Caltech's Ramo Auditorium, the East West Players will give one performance only of their multi-media revue, *Once Upon in America*. In it, some of today's Asian Americans celebrate in song, dance and story, ten decades of the past, along with some future aspirations. For information, call 793-7043.

Harvey Pittel, who has won world-wide acclaim for his talent with the saxophone, will give a recital in Ramo Auditorium, Wednesday March 8 at 8 pm. His program will include an unusual contrast in styles with music by Bach, Paul Creston, Rachmaninoff, George Heussenstamm, Joseph Lamb, Jimmy Dorsey, and Loeillet de Gant. Call 793-7043 for ticket information.

-David B. Ritchie

Fiorello

Continued from Page One

Fiorello returns to America and gives the Thea the key to the city of Trieste. Marie Fischer (Susan Eriksen), tearfully watching the romance between Fiorello and Thea, is sad because she has loved Fiorello all along.

Fiorello then runs for Mayor of New York against Jimmy Walker. Walker's campaign includes dancing girls who perform for the party faithful and sing 'Gentleman Jimmy'. Fiorello loses the election by alienating voters and ignoring the advice of the Republican politicians.

The depression strikes, and Fiorello is persuaded to run again. During the campaign Thea dies, and Fiorello proposes to Marie, who happily accepts, on the verge of his election victory.

A few problems detracted somewhat from the show, which was otherwise excellent. Several players had mild illnesses and could not sing as loudly as they otherwise could have. The

scenery was obviously inexpensive, but it was more than sufficient to set the mood and tell the audience where things were happening.

Several devices were used to draw the audience into the show. A mirror ball cast dazzling lights throughout the auditorium during *Gentleman Jimmy*. At the end of the show, balloons were dropped from the ceiling into the front of the audience, like at presidential nominating conventions.

This year's musical (as those in the past) encouraged closer faculty-student interactions in non-academic areas. Six faculty members returned from last year, to perform again. Several other faculty members are new for this year.

The ASCIT musical is also

good for community relations. All the evening performances sold out and the Saturday afternoon matinee had only ten seats left. This is testimony to the reputation The ASCIT musicals have earned in the past. People from Pasadena come to the musical and they discover that Caltech students are multi-faceted people with a variety of talents and interests, both academic and nonacademic.

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Beavers Still Winning

By Grant T. Yokum

The Caltech pucksters handed Pierce J.C. their first official defeat of the year last Sunday night in a thrilling 6-4 win for the Beavers. That's right! The spirited Techers are now riding a 6-game winning streak. They are wagging their tails and the opponents don't know how to handle it. What's more, the fans are calling Caltech the Montreal of college hockey.

The style studs led the way against Pierce in the first period, giving Caltech a 2-1 edge, with Lye and Culick accounting for the goals on passes from Wood. "Wow!", shouted a fan, "Those guys really have class!" "Piece of cake!", chorused the studs in reply.

Bill Greene, showing his blistering slap shot and elusive leg work, took command in the remaining two periods, where he scored three goals. Mike Friedman gets credit for the other Caltech goal.

Slurper Junghans turned in an astonishing performance, and afterwards was at a loss to explain his 23 saves. He, of course, gave due credit to the almighty spirits who were apparently well satisfied with the pre-game sacrifices. (By the way, the team is looking for any young virgins who may be interested in a celestial experience. Sorry guys, females only.) Coach Warden's only comment to The Slurper was, "It's better to have luck than skill on your side."

Highlighting the more gorey

aspects of the game, Fred The Jet, with a fancy flick of his stick, drew blood and sent a Pierce player groveling onto the ice. Culick ejaculated, "I've been working on that move all week and now I can do it without looking." However, the referees saw it (or at least they think they did) and The Jet spent five minutes in the penalty box.

The next game is Sunday, March 5, 10:45 pm, at Pasadena Ice Capades Chalet against U.C. Irvine. They are 0-13 this year and should present no problems for the Beavers. It might be a fun one for the fans, and it is the last home game of the regular season.

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WANTED: USED BICYCLE. Unfortunately, the imminent death of my roommate, James R. Heckman, (cause: handlebars pushed up nose), prevents me from including him in trade as previously advertised. Am willing to include his personal effects (especially the two wind-up alarm clocks and the electric blanket) in any deal. Contact Mark J. Rosker, the 16-A Ricketts House single, 449-9414. Note: the interest in a used bike is legitimate even if my late roommate was not.

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