

# Caltech Goes to China

## Entries from a Diary

by Rodman W. Paul

*In the November-December issue of E&S, Rodman Paul reported on the first ten days of a very unusual trip to China by a group of Caltech men this fall. The delegation included:*

Marvin L. Goldberger, *President of Caltech*  
R. Stanton Avery, *Chairman of the Board of Trustees*  
Arnold O. Beckman, *Chairman Emeritus of the Board of Trustees*  
Bruce C. Murray, *Director of the Jet Propulsion Laboratory*  
Seymour Benzer, *James G. Boswell Professor of Neuroscience, representing the Division of Biology*  
Robert F. Christy, *Vice President and Provost, representing the Division of Chemistry and Chemical Engineering*  
Robert H. Cannon, Jr., *Chairman of the Division of Engineering and Applied Science*  
Barclay Kamb, *Chairman of the Division of Geological and Planetary Sciences*  
Rodman W. Paul, *Acting Chairman of the Division of the Humanities and Social Sciences*  
Rochus E. Vogt, *Chairman of the Division of Physics, Mathematics and Astronomy*

*The second, and final, installment of Paul's diary appears here.*

*September 17, Peking:* Up early so as to go at 8 a.m. to the big new mausoleum where Mao Tse-tung lies in state. We filed into a high-ceilinged chamber where a huge white marble statue of Mao dominates the room, rather in the manner of Daniel Chester French's statue of Lincoln at the Lincoln Memorial. But there the comparison stops, for as we were carried past the statue by the pressure of the silent crowd around us, we found ourselves in an inner room where Mao himself lies in a glass or transparent plastic case — his body, save for the face, covered by a vivid red cloth that bears the emblems of the hammer and sickle and red star. The face is well preserved.

After seeing Bruce Murray and Murph Goldberger off to the airport, we headed for a day of sightseeing (in the rain) at the Summer Palace, which is on the outskirts of Peking. We have already spent quite a bit of time at the Forbidden City, with its Imperial Palace and extensive museums. At both of these palaces room after room is filled with intricate, ornate, vividly decorated treasures that were designed originally to please the favored few who so mercilessly exploited the people they ruled.

It speaks well for the sophistication and self-confidence of the present regime, and for its ultimate sense of beauty, that today money is being spent to restore these treasures, and that there are no attempts to discourage the long



The three-week visit ended with a "Dancing Opera," staged by graduates of the Shanghai Academy of Performing Arts.

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queues of Mao-suited modern equalitarians that wait so patiently to see them. I suppose the leaders reason that, after all, they have totally eliminated the privileged minority — emperors, landlords, Mandarin elite, and merchants — for whom these wonders were created, and therefore the new society might as well enjoy the artistic heritage of the old. There have been some casualties. Old China Hands would point out that since 1949 a vast open space, suitable for political mass meetings, has been created by bulldozing the whole area in Tian'anmen Square, directly in front of the Forbidden City complex. The new structures that face into this big central space include the Great Hall of the People, the Working People's Palace of Culture, and the Monument to the People's Heroes, all done in massive neo-Stalinist style.

At the Forbidden City we passed through the Hall of Sublime Tranquility, the Hall of Middle Tranquility, and the Hall of Complete Tranquility. It was suggested that Millikan Board Room be rechristened with one of these names, in the belief that such action would surely inspire the Faculty Board, IAC, and Board of Trustees to magnificent achievements.

### *Notes on things experienced and heard:*

When Bob Christy and I got on a crowded public bus to go shopping, to our embarrassment the Chinese passengers insisted on getting up and giving us a seat. Everywhere we have met this good-tempered courtesy and kindness. At night one can walk about Peking with a sense of safety unknown in today's American or European cities. All is quiet, there is no sign of crime or dubious-looking characters. A few men can be seen asleep on the sidewalk, from



Instrumental music is one of the activities at the "Children's Palace," a day-care center in Shanghai.

what cause I know not. A few young couples can be seen seeking partial privacy behind park bushes; privacy is scarce in this society. It is rare to see young couples holding hands or having their arms around each other as they walk, although in a very few instances we have noticed it, including one or two cases where the couple were of the same sex.

We have come to know some of our regular faculty escorts well enough to have talks about the more intimate aspects of life. Late marriage, as a means of reducing the birth rate, is now standard. The young man should be 27, the girl 25. One child per family is considered right; two is maximum. When a woman becomes visibly pregnant for a third time, the group she is associated with will reason with her and urge an abortion — i.e., apply group pressure. Out in the more distant rural areas the traditional large Chinese family is more prevalent.

Divorce is possible, although apparently infrequent, and remarriage after divorce is possible. The new husband must assume responsibility for his new wife's children by her former marriage, although the ex-husband must pay toward the support of the children.

Birth control practices are used in the attempt to keep down the size of families. One need only spend a few days among the crowds that throng the city streets to understand why the Chinese government wants a lower birth rate.

*September 18:* Up at 5:30 a.m. to make an early departure for Sian, or Xi'an. Typically of the Chinese, a good-sized group of the Tsinghua University faculty came to the hotel to say good-bye, and several of the faculty accompanied us on the hour and a half flight. The courtesies are always observed. Quite charmingly, one of the faculty said, with reference to this uncomfortably early hour, "You must be very tiresome." English is a treacherous language.

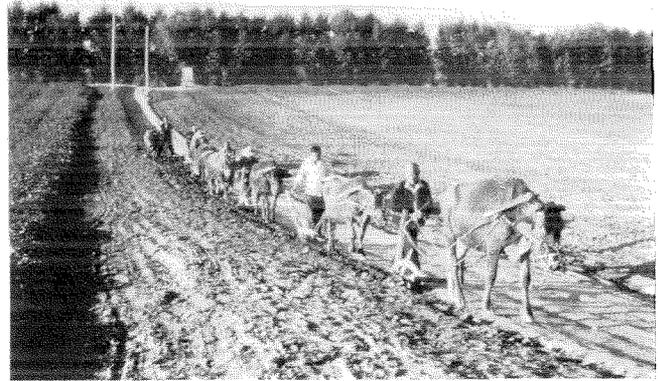
Sian, in Shensi Province, is an old city filled with historic sites and buildings. Its history runs back for 3,000 years. It was the capital of China throughout 11 dynasties, and near it is the remarkable burial site recently written up in the *National Geographic*. We were very eager to see this burial place, but first we were taken to the hot springs, scene of the "Sian incident" in which Chiang Kai-shek was captured by his own people and held prisoner until he would agree to lead a united front in the war against the Japanese invaders. We were given a long lecture by a very stern young communist who felt strongly about Chiang Kai-shek's failings. Considerable stress was laid upon the fact that when captured Chiang was clad only in his bathrobe and shorts, and had fled barefoot up the rocky hill above the hot springs. We were marched up the hill to see

in person the little cave in which the Generalissimo hid cowering. As the lecture-demonstration continued, in the face of a growing impatience among the listeners, an amusing collision of values became apparent. To young Chinese communists, accustomed to regard Chiang with the same affection that Americans might feel for Benedict Arnold, every detail of the humiliation of the leader manqué was important, but to American visitors, the prospective charms of a tomb 2,000 years old were far superior.

When we got to the burial site, in the late afternoon of a lovely autumn day, we found that excavation had ceased because experience had shown that these long-buried treasures quickly deteriorated when exposed to the atmosphere. Therefore a big building like an aircraft hangar is being erected over the site, and digging will be resumed only when this protective shell is finished. Meantime examples of the hidden treasures were on exhibit in a cement-floored shed built for that purpose. Included were life-size pottery or terra cotta soldiers, officers, a general, a crossbowman, a chariot driver, and two horses. The workmanship was remarkable; no two human figures had the same facial expression, and all were thoroughly believable as human beings. When made originally, they were painted in bright colors. The date has been set as earlier than 200 B.C., in the period when China was unified for the first time, which would be roughly contemporaneous in the Western world with the wars between Rome and Carthage. Nearby is a large artificial hill, or tumulus, under which even more spectacular discoveries are anticipated.

Being out here in the country is a very different experience from the streets of Peking. Peasant life seems not much changed from what it must have been for centuries, save in the key respect that no one is starving. We happened upon an illuminating example of plowing: A long string of draught animals was loosely hitched in single file to a plow made exclusively of wood save for a small steel blade. We received another insight when we were told that the farmers here must deal with a problem of soil compacting, caused by centuries of feet walking up and down the same rows.

*September 19, Sian:* We spent all morning at Sian Chiao-tung University, which proved to be a technical institute. Although built only in 1956, the buildings seemed older because they had been neglected. Like all Chinese universities, this campus had a bad time during the Cultural Revolution and the Gang of Four. Before the Cultural Revolution they had 8,000 students; this fall, when they receive their first major contingent of new students in many years, they hope to be back to 4,500. Because promotions were



Tilling the soil has not changed much over the centuries. Draught animals still pull plows made almost entirely of wood.

frozen for years, the faculty is unbalanced: There are 1,500 teachers but only about 100 professors. About 15 percent of the students are women, which is better than we have been able to achieve at Caltech. English is the first foreign language, and must be studied before the student can go on to a second foreign language. Here, as at other universities we have visited, English-language materials were prominent in the library. There was formerly a strong Russian influence at Sian, but things Russian rate very low just now.

In the afternoon we were taken on a tour of historic buildings, such as the Bell Tower and the Big Wild Goose Pagoda, and the Shensi Provincial Museum. The latter has the most unusual "library" I've ever seen: a collection of big stone tablets, each taller than a man, on which are chiseled voluminous Buddhist texts. We watched rubbings being made from one of the tablets, and Barclay Kamb, who has become intrigued by Chinese calligraphy, bought a handsome example of such a rubbing.

*September 20, Sian:* This was a splendid day! Unexpectedly Mr. Wu announced that he had arranged for us to visit the Peak Fire Commune, two hours drive from Sian. More specifically, we were to go to one of the "brigades" into which the commune was organized. This was a unit of 250 families, totaling about 1,500 people. The vice chairman of the brigade proved to be a highly articulate, vigorous person who spoke with the confidence and authority of a self-made man.

His story was that this used to be a notoriously poor region where the land was owned by a rich peasant. The men worked as underpaid laborers, or begged for a living, or

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The Shensi Provincial Museum has an unusual "library" of tall stone tablets, chiseled with voluminous Buddhist texts.

sold their wives and daughters into prostitution. Today the place is flourishing as a commune. The fields are beautifully cultivated, and no space is wasted anywhere. The wives of the farmers served us a bountiful lunch and proudly told us that everything they were putting before us except the beer had been grown by the brigade. As another index of how well they are doing, we were told that the head of the brigade now owns a bicycle, an alarm clock, and a wrist watch. What better evidence could you have?

In addition to feeding themselves, the brigade's farmers produce a surplus that goes partly to the state and partly to pay for farm machinery. Everyone has his own living quarters, which in most cases are big enough to house a family of five on the prevailing modest standards. We visited several homes. The main room in each was a sleeping room that doubled as the sitting room, but was not crowded because the furniture was limited to a big raised area — a kind of broad shelf — that served as a double bed, two or three plain wooden chairs, and a small wooden table. The kitchen was outside, across a little alley. A storeroom and additional sleeping space were upstairs.

Even more persuasive was the story of why the school buildings had been inconveniently located on terraces carved out of the loess soil of a steep ridge above the houses and workshops. The school was put there partly to avoid taking valuable flat land out of production, but partly for emotional reasons. Under the present school buildings there used to be a trench known as the Ditch of the Dead Children. Back in the bad old days children by the dozen were buried there as they died of malnutrition and disease. The commune resolved to build their simple classroom buildings right on top of this former disaster area and rechristen it the Ditch of Education.

As the vice chairman finished telling us this, the kindergarten children came marching past, singing lustily. They looked chubby, healthy, happy, and quite adequately clothed. The moral to the story was inescapable.

We were given license to go anywhere. As we walked through the classrooms and study halls of the older children, we were unanimous in thinking them remarkably well disciplined by American standards. Their mathematics problems, the only part of the school work that we could grasp across the language barrier, were fairly impressive for the age group and for a rural school. All children attend both elementary and middle school, the latter being equivalent to five years of junior high and high school in America.

Today we also visited a country museum that is being developed to show Tang dynasty relics at the site, instead of carting them off to a distant city. The valley around the museum was dotted with burial hills, but we weren't allowed to visit any where digging was taking place. They had on exhibit some striking pottery figures and bronze artifacts, together with some large, partly deteriorated murals found along the tunnels that lead into the tombs.

Looking at the problems they have encountered, especially the question of how to preserve the murals, one couldn't help but wonder whether the Chinese are in touch with archaeologists who have been dealing with comparable difficulties in other parts of the world.

I had the same uneasy doubt at the museum yesterday. When a country has been so isolated for 30 years, it must have been impossible to keep up with what your professional compeers have been learning recently — in archaeology as in science.

*September 21:* The day started awkwardly when we were told that our plane's departure time for Nanking had been advanced from 1:30 p.m. to 11 a.m. This meant speeding up our one remaining event, which was to visit the Banpo Museum, where a big shell has been erected over a paleolithic dwelling site. Carbon 14 tests indicate that this Stone Age site must have been occupied from about 6000 to 3000 B.C. As the archaeologists have had the mud dug away, traces of a whole village have been disclosed, a village of round houses with sloping roofs.

We flew out of Sian in a noisy old turboprop that was probably of Russian design and Chinese construction. There was a pleasant informality about the whole venture. We put down at Chengchow (or Zhengzhou), on the southern bank of the Yellow River, because the pilot said that he needed more gasoline. While the plane refueled at this isolated airport, we were served a good Chinese lunch.

At our destination, Nanking, we were greeted by the usual courteous delegation and had the usual tea ceremony while the program for our visit was discussed. Then we were driven to our hotel, which had the wonderful name of The Inn with the Double Gates to Heaven. My bedroom pretty nearly lived up to the hotel's title, for it was a light, airy, cheerful room that contrasted happily with our depressingly heavy quarters back at Sian. There we had been housed in a compound built for the Russians, whose taste was doubtless to blame for the heavy draperies, dark brown paint, and heavy furniture. The BBC could have shot *Anna Karenina* there.

But even the Gates to Heaven have their imperfections. In the middle of the night the people upstairs took baths, and when they pulled the plugs out of their tubs, there was a roar of water in the Caltech bathrooms immediately below, as dirty bathwater came spouting out of the drains in our tubs, sinks, and in the floor itself. Robbie Vogt, ever the man of action, went steaming down the hall to protest to the night clerk that there was an inch of dirty water all over the bathroom floor. The clerk looked at him with a beaming smile and said, "Good! Good!"

*September 22, Nanking:* This is a lovely old city with wide boulevards lined with sycamores that are trained to arch clear across the street. There is less horn blowing and a generally quieter pace than in previous cities we have visited. Visually it sometimes reminds one of Paris.

Nanking, or Nanjing, has the lower reaches of China's mightiest river, the Yangtze, at its foot, and a range of mountains at its back. Last night, immediately after our arrival, our hosts took us to the foothills of those mountains to see Sun Yat-sen's tomb. Unlike Mao's mausoleum in Peking, Sun Yat-sen's has been designed in traditional Chinese architecture and has been set into the natural beauty of this heavily wooded hillside. There are 400 steps to the top, but all of us made it. Much was said by the Chinese about Arnold Beckman's insisting upon making the ascent. The traditional Chinese respect for age has survived the revolution. Having discovered that Arnold was born in 1900, they never fail to mention his age and refer to him with a well-deserved veneration. But when our hosts finished off the evening by taking us to a Buddhist pagoda seven stories high, only Barclay, our youngest, had the reserve left to climb it.

Last night was a bit difficult because we were suffering from a combination of a virus infection and diarrhea. Our hosts had planned a welcoming banquet for us, and it proved to be a very pleasant affair marked by excellent food and good conversation. I was proud of the way our

delegation marched in and participated. Stan Avery, with his diarrhea under self-treatment, led the procession, followed by Bob Christy, with diarrhea and temperature of  $100\frac{1}{2}^{\circ}$ , then Robbie, temperature of  $102\frac{1}{2}^{\circ}$ , then the rest of us with our varying degrees of bowel and fever complaint. But the fine thing was that we enjoyed the evening. Even Seymour Benzer, our roving gourmet, conceded that the food was very good. Our inner condition was suggested only by the fact that we declined the green apples that were offered for dessert.

Today's sightseeing began with a trip to the impressive Changjiang Bridge over the Yangtze. This is a long double-decker that handles railroad trains on its lower level and automobiles above. What makes the Chinese so proud is the fact that they built it themselves after the Russians broke their contract and quit supplying the special steel that was needed. Instead of taking two hours to be ferried across the Yangtze, a railroad train now crosses in two minutes.

Then we headed up into the mountains to inspect the observatory that is operated there under the jurisdiction of the Academia Sinica. This went so well that it was arranged to have Robbie, Barclay, Bob Christy, and Bob Cannon put on a three-hour session this evening for the astronomers and astrophysicists of the observatory and Nanking University. While they were thus gainfully employed, the remaining four of us went to see a play staged by the provincial affiliate of the Peking Opera Troupe. This play was characterized by brilliantly colored costumes and by a theme that was important under the old regime: A young man who had scored No. 1 in the examinations for the civil service was chosen to marry the king's daughter. Not being quite honest, the young man tried to conceal the tri-



Members of the Caltech party make their way up a steep slope to the Peak Fire Commune school. Behind them are the residences and workshops, and behind those, orderly rows of fields and trees.

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The school sits high on a terrace carved out of the ridge. Beneath the building there used to be a trench in which were buried the many children who died of malnutrition and disease.

fling detail that he already had a wife and two daughters who were starving while he crammed for his exams.

A very full afternoon at Nanking University demonstrated that the university is making a gallant attempt to pull itself up from its present position. The 6,000 students that they had before the Cultural Revolution have shrunk to 1,600 today, although they hope that next month, with their first crop of new students who have taken entrance examinations, they will be back to 3,500. Their list of 1,600 teachers is very misleading, because the university has no retirement policy and thus has people who, by age or ill health, are quite unable to teach.

Determined attempts are now being made to raise standards for both faculty and students. Hitherto students were told what they would study before they arrived at the gates to the university! The new plan will specify that a student must accumulate 120 credits to graduate, and then will permit the student more than one way to achieve that total. Research at the postgraduate level was killed by the Cultural Revolution and Gang of Four, but will be reinstated this fall. Under questioning by us, the administrators explained that most of the basic plans are made by the state, but some leeway is left to the university.

I had a good separate session with the senior man in history and the corresponding man in philosophy. The historians have the interesting idea of centering their teaching around Nanking itself, because Nanking is an old city that was the capital of China through six dynasties and has a well-documented history that illustrates the role of feudalism, capitalism, and the peasantry. But they assured me that they also teach British and United States history, though their American history stresses events *after* the Second World War. In response to my question, the

philosopher said that while of course they teach Marxism-Leninism, they also teach Confucianism and Buddhism, together with European philosophy and symbolic logic. The comment about Confucianism interested me, because Confucianism has been much out of favor politically since the revolution, since it is regarded as a prop of the old regime.

*September 23:* Before leaving Nanking, we visited the tomb of the first Ming emperor and the museum of the ill-fated Taiping Rebellion, a 19th century peasant revolt that is regarded now as the precursor of the present People's Republic, and is honored accordingly.

The five-hour train ride to Shanghai seemed restful after the activity of the past two weeks. The pattern outside the train windows was one of neat fields and irrigation canals, with only an occasional indication of industrial plants. At Shanghai, the second-class passengers were unloaded first, then the train was backed off to a separate and uncrowded platform so that we lordly folk could descend in style. In an egalitarian country! Our hosts from Fu Tan University were on hand to greet us and to escort us to our hotel, where we slept well save for occasional interruptions by a noisy Iranian soccer team.

*September 24, Shanghai:* We were taken first to the Shanghai Industrial Exhibition. China is very dependent upon Shanghai for heavy equipment and technologically sophisticated machines. But when you really studied the exhibits, you came to realize that most of what we were seeing were prototypes or working models. Included was a potentially important machine for transplanting rice, but we were told that only 45 of them are in use.

Then we went to a lovely but hopelessly overcrowded park that was once owned by a very rich man. This being Sunday, a good percentage of the population had the day off, and this seemed to be one of the few places to which they could go. In Los Angeles terms, it was as if the grounds and art galleries of the Huntington Library were being forced to serve a crowd that would prefer to be at Disneyland or Knott's Berry Farm.

In the evening we were given a fine welcoming banquet, with many toasts and many courses. I've become intrigued by the position of women in regard to these very nice entertainments. The announced dedication of the People's Republic to equality between all humans naturally includes equality between the sexes, and where we have dealt with women as faculty members, administrators, or interpreters, they have been included in the lunches and dinners given for us, but faculty wives have never been present; nor, in-

deed, have we ever met faculty wives or seen faculty homes. The custom of the country, then, seems to draw a distinction between family life and official activities.

*September 25, Shanghai:* We spent a full morning at Fu Tan University, where C.C. Tan, who took his PhD in biology at Caltech (1936), presided in impressive fashion. Fu Tan, which was founded in 1905, is a comprehensive university that covers both the arts and sciences. It suffered severely under the policies of the Gang of Four. Classroom teaching was reduced, science was required to produce useful products, open enrollment of students was established, and students were not examined while in residence. Half the laboratories were destroyed, and the other half damaged. Most teaching and research have now been restored, and the hope is that by 1980 the university will be back at the level it had before the Cultural Revolution.

As we sat listening, in a reception room where the breeze through the open windows kept billowing the curtains, I became conscious of two sounds that suggested some of the opposing pressures to which a Chinese university is now subject. The one was the blaring of martial music played over a public address system, the other the periodic scream of jet engines as planes approached the airport. The first was a reminder that this is a controlled society with a large military element, the other an evidence of China's need to bring its basic science up to date so that it can cope with modern technology.

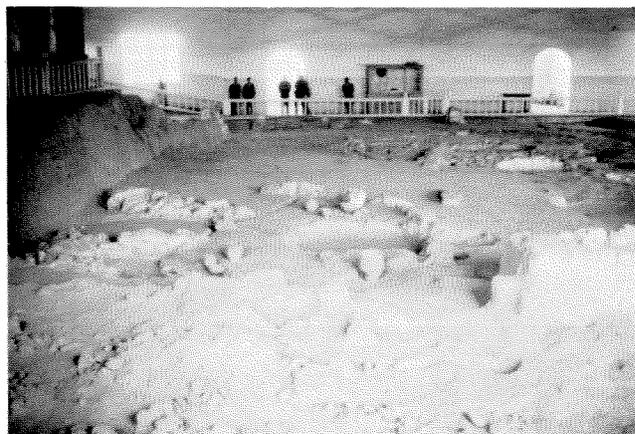
In the afternoon we had a most interesting visit to a workers' housing project. Before going inside, we walked through the stores that serve the residents. Owned and operated by the state, the stores offer most kinds of basic food, clothing, and household goods. There were plenty of customers. We visited also the two elementary schools that look after the rather large crop of children. Then we went to the modest little home of a chemical worker. This man and his wife, and their married son and daughter-in-law, live in two rooms of this multi-residence building. The physical arrangement of the apartment reminded me very much of the agricultural commune we visited outside Sian. The main room was a combined sitting room and bedroom, with a large double bed, three simple chairs, and a wooden table. A smaller inner room contained little save another double bed. This apartment shares with its neighbor the use of a grubby little kitchen across the hall (two small stoves with a total of four gas burners), plus a sink for doing laundry and a bathroom containing a toilet and tub.

The chemical worker expressed great satisfaction with his home. Before the liberation in 1949, his family lived in poverty and in a small fraction of the living space they

now enjoy. As was true of the agricultural commune at Sian, it's a question of where you start from. Having grown up in a large family that had to squeeze into one very small room, and still were very poor, this man regards his present two rooms plus kitchen-laundry-bath facilities as most luxurious. What's more, he can afford it. He is paid 70 yuan per month while his rent is only 7 yuan — a ratio of 10 to one. His rent and some of the controlled prices at the stores have actually been reduced recently, while his salary has been increased slightly.

He apologized for the absence of his wife, who has a full-time job just as he has. Her job gives her Sundays off duty, while his makes Mondays his free day, which was why he was at home. I asked whether the two of them ever shared the same days off, so that they could do something together. With apparent surprise, he replied that once a year they enjoy a three-day holiday at the Chinese New Year, and there are two additional national holidays. So they have five days together; what more could you want? Both work eight hours per day, six days a week.

While the chemical worker made us tea, the man who is called "the cadre" of the project explained how things work. In referring to this man as "the cadre," the Chinese mean that he is the political leader and administrator. This building was put up in 1960 and has been whitewashed since, though the maintenance did not seem good. There are 16,000 family units in the project, housing about 61,000 people. New buildings are being put up, but demand exceeds supply. I pressed the question of how does a worker get admitted to a housing project. The answer was that an applicant must go to the local housing board or committee, which will try to help him. Not enough hous-



At the Banpo Museum in Sian a protective shell has been erected over a Stone Age dwelling site, which was probably occupied from about 6000 to 3000 B.C.

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ing is available, and the state is hard put to find the resources to build more. We got the impression that through lack of funds and supplies, the state is probably putting less reinforcing steel into these projects than modern earthquake standards would require.

*September 26, Shanghai:* In the morning we went to a hospital to witness an acupuncture operation to remove a woman's thyroid. Throughout the 45 minutes of this successful operation we were surrounded by a visiting delegation of Belgian surgeons, physicians, and anesthetists, who broke into a cheer when the operating surgeon triumphantly held up the removed thyroid gland. I am sure the patient must have been conscious throughout, because I saw her eyes move frequently.

During a session with the chief acupuncture surgeon after the operation, we were told that the percentage of operations using acupuncture at this hospital has been declining sharply, from a former 40 to 50 percent to only 15 percent today. As in Christian Science, the patient must have faith in the process for it to work. The patient this morning was given Demerol as a sedative, in accordance with their usual practice here. As the surgeons have gained in experience, they have greatly reduced the number of electric needles used in an operation. Where formerly 20 to 40 were standard, today only 2 or 4 are employed.

In the afternoon we had a fine visit to the Institute for Traditional (Chinese) Art, which is part of the Shanghai Academy of Art. Elsewhere in Shanghai there is a unit devoted to modern art. During the days of the Gang of Four, most kinds of art were prohibited here, and the Institute was virtually closed. The artists showed us the whole



At the Institute for Traditional Art in Shanghai, an artist demonstrates the whole process of traditional Chinese painting.

process of traditional Chinese painting, starting with what they called the Four Friends of the Artist: brushes, black ink, a stone to grind the ink on, and tissue-thin paper made of a cotton base. Painting is necessarily done on a flat surface rather than an easel, because otherwise the ink or paint would run. Other colors are used in addition to shades of black and gray. When finished, the painting is hung up to dry, then is pasted onto a paper backing with a paste made of fine-ground wheat. To get rid of the wrinkles, this is mounted temporarily on a board while the wrinkles are smoothed out. The final result is then transferred to a new paper backing and framed in silk matting.

Some famous artists let us watch them at work. Theirs was a fascinating combination of the literal and the impressionistic. The artists are by no means unaware of Western trends, for some of their paintings showed a clear Western influence, especially in the depiction of people.

*September 27, Shanghai:* After spending hours shopping in the department stores of this lively and relatively modern city (quite different in flavor from other cities we have visited), we were taken to see a "Children's Palace," which is one of Shanghai's proudest displays. This is a combination recreation and day-care center that tries to cope with the problem of looking after children of all ages while their two parents are at work. The "Palace" serves 1,000 children per day, which sounds impressive until you stop to think how many tens of thousands of children there must be here. But we were told that there are other "Palaces," only not so big or so rich in their offerings. This particular palace provides everything from a penny arcade, where there are mechanized horses to ride and toy rifles to shoot, to all kinds of arts and crafts involving wood or metal or painting, plus a great deal of instrumental and vocal music, ballet dancing, and amateur drama. What they were doing was very good, but applications for admission are so heavy that each child is permitted to have only one or two days per week here. What happens to them on the other days?

In the evening we were taken to a most attractive "Dancing Opera," as they termed it, put on by young graduates of the Shanghai Academy of Performing Arts. The performers were beautifully trained, and they staged a very finished performance. It was interesting to note that the traditional heavy Chinese makeup had been applied less thickly, and the ballet-type dances were less formal than at the Peking Opera, perhaps because of Western influences. The leading lady's dances, with a long silk scarf flowing behind her as if suspended in midair, were superbly graceful. It was a lovely way to end our three-week visit to China. □