



A China odyssey

Denis P. Dorsey | Robert S. Hopkins, Jr.

In 1972, Denis Dorsey and Robert Hopkins of the Communications Research Laboratory, RCA Laboratories, Princeton, New Jersey, traveled to China in connection with the RCA Videovoice system.¹ The following is an account of their trip.

Whoever wants to know a thing has no way of doing so except by coming into contact with it, that is, by living in its environment.

...Mao Tse Tung

In February, 1972, we embarked on an incredible journey to the People's Republic of China, truly the experience of a lifetime. For nearly twenty-five years, China's borders had been securely closed to Americans; then suddenly a few with specialized skills in telecommunications were invited to The People's Republic to prepare for President Nixon's historic visit. We were among those fortunate individuals.

On February 10, 1972, we boarded a Pan Am 747 jet in New York bound for Hong Kong via Los Angeles, Honolulu, Tokyo, Osaka, and Taipei. With only a few day's notice we were off on a journey that would take us half-way around the world to spend an undetermined amount of time in the communist country that had been an enigma to Americans for over two decades. The aura of adventure was augmented by the paucity of available information: no one, including the State Department and the American Consulate in Hong Kong, could tell us what to expect.

Our arms ached from all the immunization injections and our bodies were hopelessly jet-fatigued from flying nearly 12,000 miles over

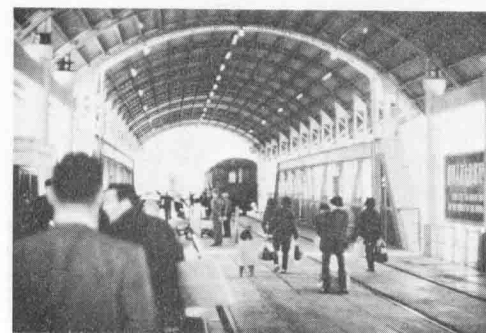
multi-changing time zones. Yet our arrival in Hong Kong still seemed a spectacular event. The breath-taking evening approach to Kai Pak International Airport clearly reveals Hong Kong as the gem of the Orient, where two worlds meet. Our instructions were to maintain daily communications with the RCA Globcom office in New York while awaiting contact by the Chinese. This lasted almost forty-eight hours until the Kowloon-based China Travel Agency provided our entry visas and instructed us to be on the early morning (February 14) train to the Lo-Wu checkpoint.



Entering China at Lo-Wu.

Entering China

The Kowloon railroad station was teeming with thousands of Chinese returning to the mainland to celebrate the New Year, the Year of the Rat.



Leaving Lo-Wu by walking across the bridge.

We were beginning our Chinese adventure during the most festive week of their year. For nearly an hour, the crowded train wound through the New Territories before reaching Lo-Wu and the famous Anglo-Sino constructed bridge spanning the Pearl River. After a brief passport inspection ordeal by British and Gurka troops, we made that long walk across the Lo-Wu Bridge toward the ever-increasing volume of martial music. Moments later, there we stood, incredulous, in the People's Republic of China! For the first time since our trip began, we felt the overwhelming impact of its reality, actually standing in the land of Mao. Our emotions were a mixture of apprehension and anticipation. We had absolutely no idea how we would be received by the Chinese or when we would be permitted to return home; yet we were eager to begin experiencing this totally different culture.

There was a formal welcome to the People's Republic by a female member of the army, following which we were escorted to a second-floor waiting room located in an official administration building. Within an hour our entry visas were approved, our luggage inspected, our passports turned over to military officials, permission granted to use our cameras and audio recorder, and our Hong Kong currency exchanged for Chinese Yuan and Jaio. After being served a magnificent multi-course luncheon, we were comfortably seated on the speeding Canton Express, watching Lo-Wu disappear from sight.

Evidently this train is one of the prized show pieces of the Republic. In marked contrast to the Hong Kong train, the Canton Express was immaculate. About a dozen Chinese soldiers shared our car, so we rarely left our seats. Yet a young girl constantly damp-mopped the floor, washed the windows, and dusted the empty seats. In between her cleaning rounds, she served traditional green tea in attractive Chinese mugs equipped with matching lids for steeping. There were even those old-fashioned white lace doilies on the back of each seat. Loudspeakers blaring martial music and quotations from Chairman Mao provided continuous entertainment.

Canton is several interesting hours by train from Lo-Wu. Shortly beyond the rugged border terrain, the countryside expands into broad plains. The landscape is laced with rice fields and dotted with small villages. Water buffalo, people working the endless fields, and others riding bicycles were common sights. We saw no mechanized farm equipment on the communes we passed, nor did we see a single paved road, just miles of apparently hand-tilled land.

We reached Canton by mid-afternoon and were promptly greeted by a gentleman associated with Shanghai Telecommunications, whose employees were to be our co-workers eventually. The automobile trip from the center-city railway station to a police station was a rare experience. The streets were so crowded with pedestrians and bicyclists that the car had to proceed at a crawl. Each time it stopped, masses of people dressed either in solid blue or gray surrounded the car with a sea of curious, staring faces. All of the buildings were drab sandstone structures, none more than four stories high. The city seemed completely devoid of color. Even all the bicycles were painted black. After we had traveled several miles, the people, bicycles, buildings, streets — all seemed to melt into a mass of gray.

When the People's Police were satisfied with our papers, we were taken to the Tung Fang Hotel. Then we spent the remainder of the day exploring Canton unescorted. Our first opportunity to mingle with the people of China occurred in a park across the street from our hotel. After paying the Chinese equivalent of one and a half cents, we entered the area and found it crowded with New Year celebrants. A group of about twenty curious youngsters quickly fell in step behind us. We were eager to make friends, but felt frustrated by the language barrier. Then we spotted a young boy about to have his picture taken by an elderly Chinese gentleman. Without the boy's realizing it, Denis moved in from behind and proudly posed with him for the photograph. This spontaneous act proved to be an ice-breaker. People, particularly children, appeared from all directions with cameras, anxious to take our pictures and to have us pose with them in group photographs. We enjoyed a period of warm non-verbal



Broad plains between Lo-Wu and Canton.



Denis Dorsey with Chinese co-workers at telegraph office.



Tung Fang hotel at Canton.

This photo of authors Dorsey (far right) and Hopkins (center) was taken at Hungchiu Airport at Shanghai, before returning to the U. S.



Robert S. Hopkins, Jr., Communications Research Laboratory, RCA Laboratories, Princeton, New Jersey, received the BSEE from Purdue University in 1964 and the MS from Rutgers University in 1967. In 1964 he joined RCA Laboratories and in 1966 was granted a Doctoral Study Award; he received the Ph.D. in 1970 from Rutgers. He was elected to Tau Beta Phi, Eta Kappa Nu, and Phi Eta Sigma. Prior to his involvement with RCA's Videovoice Project, he did mathematical analysis of high-frequency MOS transistors and electrostatic pick-up devices. In addition he has been associated with research projects involving the development of high density storage methods, laser photographic recording, and thin film technology. Dr. Hopkins was responsible for the development of the scan conversion electronics used with the existing Videovoice system and presently he is assigned to RCA's Palm Beach Division assisting in advance Videovoice techniques. He is a co-holder of three pending patents and this year was recipient of an RCA Laboratory Achievement Award.

Denis P. Dorsey, Communications Research Laboratory, RCA Laboratories, Princeton, New Jersey, received the BSEE from the University of Delaware in 1958 and the MSEE, with honors, in 1962 from Drexel Institute of Technology. He was elected to Eta Kappa Nu and Tau Beta Pi. In 1959 Mr. Dorsey joined the Astro-Electronics Division of RCA and was responsible for the design and development of several television camera systems as well as related studio and satellite ground-station equipment. While with AED, he contributed to the TOS and Nimbus HRIR satellite programs and was a member of the first TIROS project team. In 1966 Mr. Dorsey transferred to RCA Laboratories where he designed the video decoders for the Homefax facsimile receivers and the video encoders for the NBC Homefax transmitter. In addition, he coordinated the efforts of the Laboratories and NBC in field testing the Homefax system. Mr. Dorsey also developed an SRI single-vidicon color-encoding television camera that was used to produce holographic color video images. Recently he has designed several video storage units, test systems for the product divisions, video terminals, special television cameras, and frame-freeze units for the RCA Videovoice system. Mr. Dorsey has nineteen patents either granted or pending. This year he received an RCA Laboratories Achievement Award and a David Sarnoff Award for Outstanding Technical Achievement.

communication that was one of the highlights of our trip.

During this camera camaraderie with the Chinese, we had been moving deeper into the park. Therefore, we exited from a different gate, immediately finding ourselves in unfamiliar territory. Fortunately, before leaving the Tung Fang, a member of the hotel staff had given us a note in Chinese explaining that we were "American guests of the People's Republic and looking for the Tung Fang Hotel". Using this precious piece of paper and faintly recalling landmarks, we returned to the hotel by dusk. We spent the evening safely within the Tung Fang, sampling authentic Cantonese cooking in the huge dining room.

On to Shanghai

During breakfast at the airport the following morning (February 15), we inquired about the flight's departure time. We were informed the plane would leave as soon as we were ready, since we were its only passengers. We were, however, accompanied on the twin-engine, turbo-prop Ilyushin aircraft by six soldiers and a young girl who was also dressed in military garb. (There are no commercial passenger airlines in China; all planes are government controlled and operated.) Our khaki-clad personal hostess supplied us with a steady stream of

candy, gum, and tangerines. Using hand signs, facial expressions, maps, pencil and paper, this delightful girl conveyed our flight schedule, landings, and estimated time of arrival in Shanghai. During this contrived conversation, we pointed out the area of the United States on our world map, prior to indicating our home states. We were surprised and impressed when she immediately corrected us by including Hawaii and Alaska in her gesture.

Our initial stop was Nanchang, hundreds of miles inland, where we stayed just long enough to realize how very cold Northern China seems in winter, especially when there is little relief from the chill in its unheated buildings. The second stop was beautiful Hangchow, where we enjoyed meeting and having lunch with a city official. He seemed genuinely pleased at our arrival and spent much time asking about our families, talking of our President's pending visit to Hangchow, and answering our questions. (This interchange was accomplished through an interpreter he had brought along.) One particularly astonishing fact emerged. Prior to the announcement of Mr. Nixon's trip, the city of Hangchow had no airport. It had been built for the brief one-day stopover of our President!

The final portion of our flight to Shanghai, the world's most populous city, lasted approximately an hour. When we stepped down

from the plane at Hungchiao Airport, it felt as though we had landed in the Arctic. The strong, gusty wind easily penetrated our lined raincoats, making the 10° F temperature seem much lower. Fortunately, the Chinese Army quickly provided us with two of their fur-lined overcoats, which were to save us from freezing during our stay in Shanghai. We were met by Mr. Tin Win of RCA Global Communications and Mr. Liu, our official host, of Shanghai Telecommunications. Within minutes several gray sedans arrived to transport the four of us and the usual accompanying soldiers into the city.

Hungchiao Airport is about ten miles west of downtown Shanghai. As the motorcade traveled along Nanking Road, we noticed many giant red billboards proclaiming: "Long Live Chairman Mao!", "Long Live the Great Unity of the People of the World!", "Hold High the Great Banner of Mao Tse-Tung Thought!", etc. That Mao is omnipresent, dominating every aspect of Chinese life, was becoming increasingly obvious to us. We passed a former racecourse now converted into a People's park with its clubhouse serving as a library. We continued down Nanking Road toward the Whangpoo River, turned left on Chung Shan Road, left again on Peking Road, and stopped at a side entrance of the Hoping (Peace) Hotel.

Initial impressions of Shanghai

This eleven-story building, which was our residence throughout our stay in Shanghai, had been the elegant Cathay Hotel, formerly famous for its gin gimlets and beef Stroganoff. The ornate front entrance had been completely sealed off, the old plush lobby furniture concealed in white sheet-like slipcovers, and the huge walls redecorated with Chairman Mao's thoughts and a giant tapestry of his birthplace, Yen'an. The reception desk and small State store were staffed by men and women dressed identically in padded blue pants and jackets. Upstairs, the original thick red carpeting covers the corridors and the large, high-ceilinged rooms still contain the old heavy British furniture and bathroom fixtures. Many English-language engraved brass signs also remain, mute evidence of yesteryear.

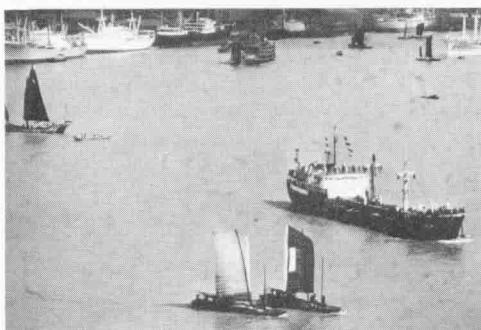
We soon found that our freedom within the hotel was restricted to the lobby, lower mezzanine, and the seventh floor where our rooms were located. Other than the eleventh-floor dining room, the remainder of the Hoping Hotel was off-limits and remained somewhat of a mystery to us. Throughout our semi-confinement, every hour on the hour the huge clock atop the Customs House (a few blocks away) chimed the national anthem "The East is



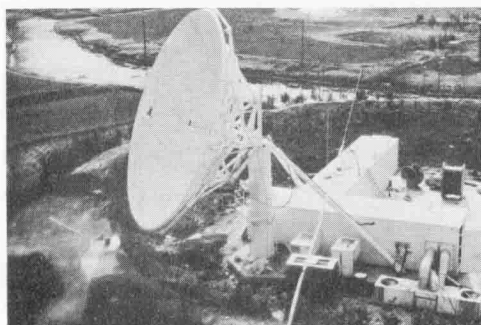
Hoping hotel at Shanghai.



Chinese airplane for flight from Canton to Shanghai.



Boats on Whangpoo river.



Earth station antenna for tv reception from satellite at Shanghai airport.

Red", a gift and constant reminder of the Red Guard.

Several aspects of those first days in China were to characterize our entire stay. The most significant of these to us was how thoroughly the Chinese had arranged each detail of our lives. Looking back, we realize that almost every hour had been planned for us. Our regimented schedule included designated times for working, resting, eating, tea-breaks, cultural events, and social functions. On our various outings, we were transported in one of the few Chinese cars, all dull gray Shanghai-built sedans for official use only. Being an uncommon sight and driven with the horn constantly blaring, an automobile always attracts attention in China. As May-Quas (Americans) traveling in this manner, our conspicuousness was intensified.

Because most of Shanghai's immense population had never seen a Caucasian, let alone an American, the crowds we drew in Southern China were minor compared to the throngs we attracted in downtown Shanghai. We could not leave the hotel without several hundred curious Chinese engulfing us. Hotel personnel and the People's Police tried to alleviate this situation, but finally suggested that it would be in our best interest if we did not leave the hotel unescorted until local residents became used to seeing us.

Chinese culture, then Videovoice

On our first three evenings in Shanghai, we were entertained by a revolutionary opera, a table-tennis exhibition, and an acrobatic performance. As we entered the great opera theater in the Nanshih District, we were thrilled to receive a standing ovation from hundreds of Chinese patrons and members of the performing company. The colorful production of "The White-Haired Girl" featured patriotic songs and acrobatic dances. At the table-tennis exhibition in Kiangwan Gymnasium, boys and girls ranging in age from eight to sixteen clearly demonstrated why the Chinese are considered the best ping-pong players in the world. In the acrobatic show, which is their version of our circus, dozens of young performers delighted us with their agility and versatility. This proved to be one of our most pleasant evenings; for the first time we saw large groups of Chinese thoroughly enjoying themselves.

Other than this initial sampling of Shanghai's nightlife, the next two weeks were devoted almost exclusively to work. On February 16 we returned to Hungchaio Airport and gathered all the Videovoice equipment that had been temporarily stored at the satellite earth-station.



"White-Haired Girl" opera.



Mao tapestry at Shanghai Industrial Exhibit.



Chinese circus acrobat.

Several soldiers helped us load a truck dispatched especially to transport our gear from the airport to the Shanghai telegraph office. As it turned out, the telegraph office was actually part of the Hopping Hotel. From our working area in the telegraph center, we could see our rooms on the sixth floor through a strategically located air-well. We tested this observation by placing familiar objects on the window sills of our rooms. Yet each morning our Chinese co-workers politely escorted us out of one hotel entrance, down Nanking Road, then back again through another hotel entrance to our work area.

Since we were working, sleeping, and eating in the same building, we were rather confined to the Hopping Hotel, where, incidentally, only the

bedrooms were heated. We spent most of the time arranging Videovoice transmission schedules between San Francisco and Shanghai, transmitting and receiving Videovoice signals, and instructing members of Shanghai Telecommunications in the operation and maintenance of Videovoice. All this was accomplished through our ever-present interpreter, Mr. Chen. A piece of equipment that fascinated the Chinese was our oscilloscope-mounted Polaroid camera. During one of our rare absences, they "shot-up" all twelve rolls of our Polaroid film, then asked if we would use our influence to obtain additional film from the earth-station.

Fortunately, there were a few lighter moments that helped us endure the long work schedule.



Resettlement village day-care center at Shanghai.



A forge at the Ma-Lu commune.



House at Ma-Lu commune.



Day-care center at resettlement village.



Women workers at Ma-Lu commune.



Reed weaving at the Ma-Lu commune.

Because our co-workers' Chinese names were so difficult to remember, we gave each a common American name (Charlie, Tom, Howard, Jack, Paul, etc.) and taught them the pronunciations. They enjoyed this immensely and soon were calling each other by their new names. On several occasions we were invited to midnight "snacks" where we joined some of our co-workers in strictly non-political, non-technical conversations. Surprisingly, none of our Chinese friends had ever been outside the city of Shanghai and were anxious to hear our impressions of Southern China. During one of these sessions, we were presented with personal gifts for every member of our families; this was a very moving moment for both of us. (Later we gave each co-worker a fountain pen.) On another evening we were given a special showing (in the hotel) of one of the most popular films in China, *The Red Lantern*.

We often spent our rest periods at the eleventh-floor dining room windows, observing the

crowded streets of downtown Shanghai and the fascinating traffic on the busy Whangpoo River. At any time of the day, there were thousands of people filling Chung Shan and Nanking Roads. We saw row upon row of two and three-story buildings of English architecture. There were no new buildings nor any construction sites visible. There are no bridges across the Whangpoo River that divides Shanghai, so innumerable sampans and junks accomplish all the transportation between the east and west sections of the city. In addition, since the east bank of the Whangpoo is too shallow for freighters and tankers, they must dock on the west bank and have all their east-bound goods ferried across on sampans and junks. We saw no gulls gracing Shanghai's harbor nor any smaller birds among the trees along the streets below. Apparently, the Red Guard's extermination of Shanghai's flying friends had been complete. The only noticeable feature of the sky above the city was the persistent reddish smog caused by its growing industry.

Toward the end of this two-week period, the Chinese indicated their approval of our progress and the performance of Videovoice by rewarding us with Mao buttons, monogrammed blue work-jackets, and a series of sight-seeing expeditions. We visited a resettlement village, the Ma-Lu Commune, the Children's Palace, the Shanghai Industrial Exhibition, Shanghai's First Department Store, the Shanghai General Hospital, and the Friendship Store. Most of these interesting places were also toured by President and Mrs. Nixon.

Living conditions

The resettlement village is an apartment complex in an urban renewal area on the southwest edge of the city. Each family's unheated apartment consists of two rooms that function as livingroom-bedroom combinations, a toilet closet, and access to a communal kitchen used by three other families. Their two private rooms are sparsely furnished with necessities — beds, bureaus, tables, and chairs. The kitchen contains a charcoal-burning "pot-bellied" stove and a table with a bucket of water on it which serves as the sink. Although these living conditions are not comparable to American standards, they represent a giant step forward to most of the occupants. These quarters are adequate and they offer additional advantages. The rent is approximately five dollars a month. Each apartment complex is integrated with medical clinics, schools, day-care centers, grocery stores, and light industrial shops that supply most of the needs of the occupants.

The Ma-Lu Commune, situated about twenty-five miles northeast of Shanghai, is a totally self-sufficient, highly-mechanized, agricultural community of 16,000 Chinese. Farming is supplemented by industry producing everything from clothing, shoes, and baskets to tools, farm equipment, and diesel engines in fulfilling the inhabitants' basic needs and providing employment. There are also primary and secondary schools, a small hospital, and a power generating station. Since state-regulated commune production quotas exceed the colony's own requirements, the surplus is purchased by the government and distributed in the cities. We learned that a bit of capitalism is also present. Ma-Lu families are encouraged to engage in free enterprise by growing their own vegetables in small plots adjacent to their homes and selling them for personal profit in Shanghai.

The commune's row-type stucco dwellings, although also an advance for many, contain fewer improvements than the apartments of the resettlement village. The Ma-Lu resident lives in an unheated, unfurnished, three-room shelter

with dirt floors. In the "kitchen", and "bathroom", cement blocks are arranged to form a "stove", "toilet", and "bathtub", for which water must be carried from the central well. (Using that concrete bathroom in winter must be quite an experience!) The bedroom contains one bed, a dresser, and the ubiquitous picture of Chairman Mao. (Considering the average Chinese family includes two children, two adults, and a grandparent, I wondered where they all slept — at 20° F maybe they had a good idea.) The grandmother, who was proudly showing us through her home, took great delight in demonstrating the miracle of one small second-floor lightbulb. She concentrated on the flickering bulb for a moment and exclaimed, "Chairman Mao has made this all possible!" She inquired (through the interpreter) if we were "fortunate enough to have a bulb in America."

The Children's Palace

The Children's Palace, on Yenan Road in the Chingan District, is a specialized school for selected young people, ages five through fourteen. Talented children with politically active parents are chosen from various schools throughout greater Shanghai, given concentrated training in their particular areas, and often returned to their home schools to impart these skills to others. These youngsters were impressive even at our arrival. As we approached the large complex of buildings, all of the children playing in a nearby courtyard abruptly stopped their various activities and collectively applauded our presence. (This is a customary childhood gesture of respect for adults who are then expected to indicate their approval by returning the applause. We enjoyed this refreshing ritual on several occasions, often with a single Chinese child encountered on the street.)

Inside the Palace we witnessed extraordinary performances of acrobatics, table-tennis, ballet, choral and operatic singing, string-band orchestration, and rifle marksmanship. We watched children demonstrate with undistractable concentration their cultural skills and crafts, including acupuncture, moxibustion,* chemistry, physics, electronics, industrial machinery operation, boat building, sewing, painting, basket and tapestry weaving. Before leaving this remarkable institution (the epitome of pragmatic education), the Little Red Soldiers of China staged a musical program for us that

included to our delight such old American favorites as "Billy-Boy", "Turkey-in-the-Straw", and "The Virginia Reel". There were also catchy Chinese numbers entitled "I See Chairman Mao in My Dreams" and "I Play Table-Tennis For the Revolution".

Shanghai Industrial Exhibition and a department store

The Shanghai Industrial Exhibition, also on Yenan Road, encompasses several massive buildings housing attractive displays of Chinese manufactured goods and works of art. There must be a sampling of everything China produces, including large machinery, video recorders, colorful textiles, musical instruments, and even children's toys. We were most impressed by the arts and crafts, especially the magnificent jade and ivory carvings and the immense intricate tapestries. Unfortunately, most of the wares on exhibit are exported and

not enjoyed by the people of China. The Chinese seem to have the necessary technology, but are apparently still lacking the large-scale production facilities to make these desirable products cheaply enough for the masses.

Our shopping spree at Shanghai's First Department Store revealed much about Chinese daily life. Mao dominates all five floors of this huge building; entire counters display posters, paintings, linens, tapestries, and busts of the Chairman, as well as all of his published thoughts. Chinese youngsters eagerly purchase pictures of their favorite opera stars and popular revolutionary music. The practical clothing for children is colorful, but the drab adult apparel is strictly functional. The liquor department offers Chinese red and white wines, brandies, Peking and Shanghai Beer, and bottles of fiery 140-proof Mou-Tai rice whiskey. The variety of general housewares would challenge any American department store. However, we saw very little actually being bought from the large



Acupuncture practice at the Children's palace.



Singer at the Children's palace.



Children's palace.

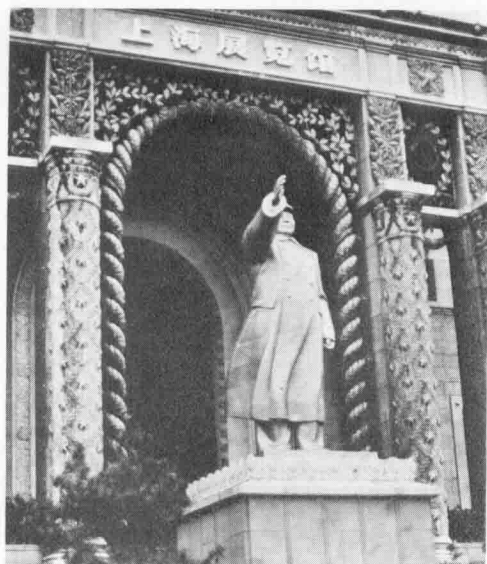


Chorus at the Children's palace.

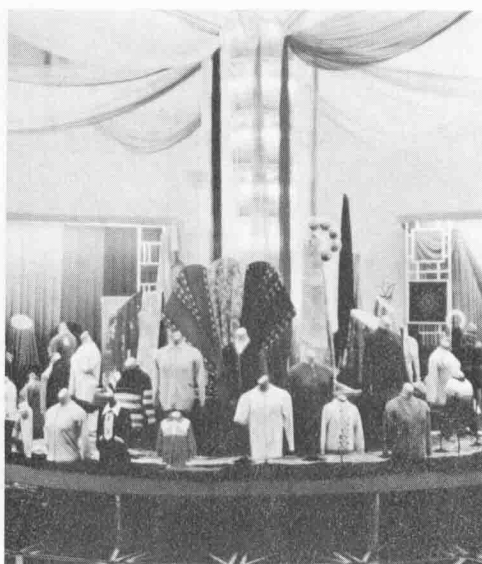


String band at the Children's palace.

*A method of treating various ailments by burning herbs in a bottle, creating a vacuum, and then applying the container's open end directly on an infection.



Mao statue in front of Shanghai Industrial Exhibit.



Chinese products on display at Shanghai Industrial Exhibit.



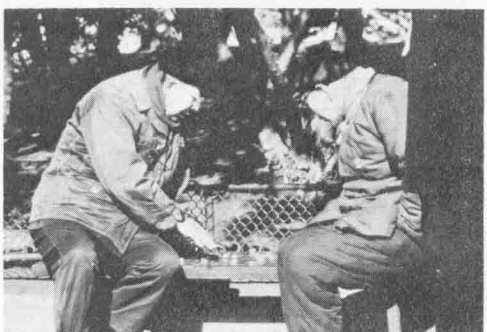
Acupuncture — young woman after thyroid operation.



Acupuncture — woman with broken leg during operation.



Acupuncture patient drinking orange juice immediately after removal of stomach tumor.



Checkers game in Whangpoo Park — Shanghai.



Cyclist on Chung Shan Road.

displays of attractive consumer goods. Although the Chinese-made Shanghai solid-state radio was a selling item, most products are rather expensive for the people. Even the necessary bicycle costs an average Chinese two month's salary. In comparison to shopping at home, we found the purchasing procedure pleasantly facilitated. We simply handed our wallets to the extremely courteous and completely trustworthy clerks, who withdrew the proper amount of Yuan, inserted the correct change and appropriate receipts, and insisted upon delivering our neatly wrapped packages to our hotel rooms!

Acupuncture at Shanghai General Hospital

We were invited to the Shanghai General Hospital to witness acupuncture anesthesia in major surgery. Although acupuncture has been practiced in China for centuries in the treatment of a wide variety of ailments, it was not until 1958 that the Chinese began keeping detailed medical records of cases involving acupuncture. They are now making very effective use of this accumulated data. We were present at three very serious operations for which acupuncture was the only anesthesia: the resetting of a badly fractured leg and the removal of stomach and thyroid tumors. In each instance, just prior to surgery we were introduced to the patients and physicians, provided with small step-stools to facilitate viewing and photographing the operations, and allotted a clear area at the patient's head to tape-record an interview during the actual surgery.

The first patient was a fifty-three-year-old woman who had completely severed her left femur near the pelvis in a bicycle accident. With three electrically stimulated acupuncture needles in her face and two stationary needles in her spine, one of the two attending surgeons made an incision approximately twelve-inches long down the pelvic area along the outside of the femur. Then they exposed the fractured area, removed splintered bone fragments, filed and smoothed the femur, and carefully bored a clean half-inch diagonal hole through the femur and into the pelvic bone. One of the doctors then drove a foot-long acupuncture needle into the woman's side for additional anesthesia, placed a narrow guide pin into the diagonal hole, and finally hammered a thick setting-pin through the femur and into the pelvis. The woman was sutured and asked to manipulate her leg from her hip to her toes. Evidently the surgeons were pleased with her performance, for they removed the acupuncture needles, and graciously thanked her for being an excellent patient. She was talking, smiling, and waving to us as she was

wheeled from the operating room.

In an adjoining operating room, a pretty twenty-eight-year-old girl was prepared for the removal of a thyroid tumor. Two small acupuncture needles were inserted into her wrists and gently rotated by the attending nurses. A surgeon cut her throat from ear-to-ear and carefully spread open the incision. Within thirty minutes a "golfball" sized tumor had been removed from the girl's thyroid gland. As soon as the surgery was completed, the girl sat up, put on a bathrobe and slippers, and thanked us for viewing her operation. She then walked unassisted back to an unheated recovery room. (Only the operating rooms are heated at this hospital.)

As we entered the third surgical room, the doctors acknowledged our presence and immediately opened a fifty-year-old man's torso from just below the rib-cage to the navel. He had just three small acupuncture needles for anesthesia, two facial, one spinal. All of his small intestines and stomach were placed on the man's chest. The surgeons rotated the stomach exposing a tremendous tumor, which was easily removed with surgical clamps, scissors, and scalpels. The stomach and intestines were placed back in the abdominal cavity and the fellow was sutured neatly together again. Within minutes after undergoing this serious operation, this gentleman was in a sitting position, talking to us and drinking orange juice!

For nearly four hours, we watched and photographed these operations, recorded conversations with the patients during their surgery, and conversed with the doctors and nurses through interpreters. The surgeons even interrupted the operations several times so that Bob could attain a better vantage point for close-up photography. All three patients were completely conscious throughout, exhibiting no pain, physiological shock, discomfort, or anxiety. The lady with the broken leg even ate several tangerines during her operation. We asked our skilled hosts the simple obvious question, "How and why does this incredible acupuncture anesthesia work?" Their very polite, collective response was, "We are not really sure."

Final impressions and farewell

On our final day in Shanghai, we left the Hopping Hotel unescorted and strolled along Chung Shan Road, which runs parallel to the Whangpoo River. At the entrance to Whangpoo Park there was a gigantic colorful billboard mural with a Chinese inscription urging the people to unite and work hard to ensure a bumper harvest for the coming year.

Inside the park skilled slow-motion shadow-boxers and ballet dancers were practising the ancient art of tai-chi-chuan, an exercise designed to maintain physical and mental fitness. The best of the performers drew great crowds of people. We walked the full length of Whangpoo Park to the Soochow Creek, saw the Shanghai Mansion building, and then retraced our steps to the Friendship Store compound. This entire area was formerly known as the Bund.

The Friendship Store occupies the former site of the British Consulate of Shanghai and is maintained exclusively for foreign visitors. The smallest of the three buildings within the compound serves as a seamen's mission. Another contains jewelry, china, and other valuable antiques acquired from the elite upper-class during the revolution. All of these items were for sale at very reasonable prices. In the largest building, various Chinese manufactured goods were sold.

We slowly returned to the Hopping Hotel, taking long last looks at Shanghai. We had been notified we were to leave the next morning. That evening we were honored guests at a gala farewell banquet planned by our Chinese friends. Absolutely everything had been elegantly arranged. The multi-course feast featured all of the finest Shanghanese meats and seafood and every dish was toasted with wine or Mou-Tai. Spontaneous speeches of gratitude, friendship, and understanding were readily exchanged between Americans and Chinese as this memorable party lasted well into the night.

On the following morning (March 5) we exchanged final good-byes with our Chinese friends at Hungchiao Airport. Our luggage bulging with prized gifts and souvenirs, we boarded a four-engine military aircraft filled with Chinese soldiers and flew non-stop to Canton. By noon we had returned to the Tung Fang Hotel, bold, confident travelers of China.

We set out immediately to once again explore Canton. As before, we attracted a huge crowd of curious people who followed closely behind us. As we progressed the number grew to possibly five-hundred people. Becoming concerned over the size of the group, we entered a food market in an effort to escape. This was not a successful maneuver, for when we left the market, not only did most of the shoppers come along, but our original followers were waiting outside! However, their mood had changed from remote curiosity to overt friendliness. Suddenly they wanted to shake our hands, pat us on our backs, walk shoulder-to-shoulder, and happily exclaim "May-Qua!" They even responded to our English phrases with gay laughter and child-like hand clapping.

Exhausted, we left this playful throng outside the gates of a "pay" park. Recuperating inside, we heard someone say, "Beautiful day, isn't it? A Chinese gentleman, perhaps seventy-five years old, sitting on a park bench, had just uttered the first distinct English we had heard in Southern China. He was fascinating. He had not spoken a word of English for nearly thirty years and yet he talked with us for almost half an hour, using perfect English. We still shake our heads in utter disbelief whenever we recall that incident.

The train ride from Canton back to Lo-Wu was a duplicate of our entrance to China. However, we thoroughly photographed the picturesque countryside on the way back. At Lo-Wu we passed through Chinese customs simply by telling the officials what we were taking from China. There was no baggage inspection, none of the usual long forms in triplicate, and no long lines. As we were leaving the land of Mao, walking across the Lo-Wu bridge, an armed Chinese soldier said to each of us in English, "I hope you enjoyed your stay in the People's Republic of China. Goodbye".

Our actual China odyssey had ended, but we were to relive it through private thought, casual conversation, and public presentation over and over again. We had come "to know" much about China "by living in its environment". We had also gained a new perspective on our own country and way-of-life. Unquestionably, we prefer our situation. However, there are some decided advantages to their system: the prevailing atmosphere of honesty, the complete absence of crime, the courtesy and respect of youth for their elders, the avoidance of waste, and the appreciation of small comforts. There are few of what we consider personal joys in China, but self-sacrifice for the overall progress of their society has improved life for the masses. In so many respects, our two contrasting countries occupy opposite ends of an imaginary continuum. Yet in spite of these vast differences, our mutual humanity is finally emerging. This inherent rapport has always been the only real basis of hope for mankind.

Acknowledgment

We wish to thank Meg Dorsey who organized most of our material, viewed hundreds of slides on China, listened for hours to audio recordings, and applied her literary skills to the rewriting of this entire report.

Reference

1. The RCA Videovoice system was discussed in the RCA Engineer by S.N. Friedman (Vol. 17, No. 20 and should be the subject of a future issue.