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OFFICIAL JOURNAL OF THE NATIONAL GEOGRAPHIC SOCIETY WASHINGTON, D.C.

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American Skiers Find

ADVENTURE IN

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By NED GILLETTE Photographs by the author

and GALE

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HED GILLETTE

WESTERN CHINA

and GALEN ROWELL

Under the eaves of the earth, Kirgiz villagers catch the day's last light on China. Now a team of U. S. skiers gets a rare look at the people who live with these giant peaks.

DUST BLOWN BY DESERT winds and stirred by hundreds of passing feet, hooves, and wheels veils the setting sun, bathing the land in soft mauve hues. Two boys sit in the road playing a kind of checkers with red and black stones.

Market day is drawing to a close in this central Asian city of Kashi (Kashgar), pressed against China's sensitive far-western frontier with the Soviet Union.

Commuter traffic swirls by us in a chaos of color and vintages, a startling contrast to the uniformity of Beijing (Peking): brightly dressed Uygur women on foot; long lines of camels padding to the clang of bells; wooden carts hitched to chop-stepping donkeys; hard-used red tractors; and an occasional olive drab state-owned truck, its driver leaning on the horn as if mere volume alone could part the masses, of which we, remarkably, now form a part.

We are six mountaineers, accepted by the Chinese Mountaineering Association to be the first Americans to climb in China in 48 years. We have christened our National Geographic-sponsored group the American Friendship Expedition. Our goal is to make the first ski ascent and descent of 24,757-foot (7,546-meter) Muztagata, in the Chinese Pamirs. (See pages 192-9.)

Flying from the United States to Beijing, then on through Ürümqi (Xinjiang's capital) to Kashi, has been a week-long journey back into medieval times. We now stand in innermost Asia, the most remote corner of this land of nearly one billion people. And each day and experience here contributes something new for our rich mosaic of memories.

Dick Dorworth, for instance, will never forget ambling alone through the ancient streets of Kashi and being stopped by a young Uygur. Pointing at Dick's black beard, the man asked, "Pakistan?"

"No," Dick answered. "America."

"America?"

"America."

Shaking his head, the Uygur squatted and

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drew a circle in the dust. On one side he made a rough sketch of China, placing a dot on the left outside edge. "Kashgar," he said. Then he placed a second dot on the far side of the circle and again asked, "America?"

Dick grinned and nodded, and the Uygur's eyes grew wide with wonder.

Also recalled is an evening, the light nearly gone, when spontaneous neighborhood music began drifting through the night: the strings of a *rabab*, the primal rhythms of a hand drum, a voice rooted in the venerable traditions of the city. The music went on until dawn, then a loudspeaker from the city center took over, blaring official music and announcements of the day in both Chinese and the Turkic language of the Uygurs.

"East meets West in Kashi every morning," quips our dynamic interpreter, Wang Wei Ping.

And at receptions. "When I was a small boy in America," I say to my hosts, "my parents told me that if I dug a deep hole straight down, I would come out in China. That journey has been a longtime dream, and we. . . ."

One man breaks in with a gleeful smile. "When I was a child in primary school, my teachers said if I dug a hole, I'd end up in America! This is our bridge of friendship!"

A Land and People Apart

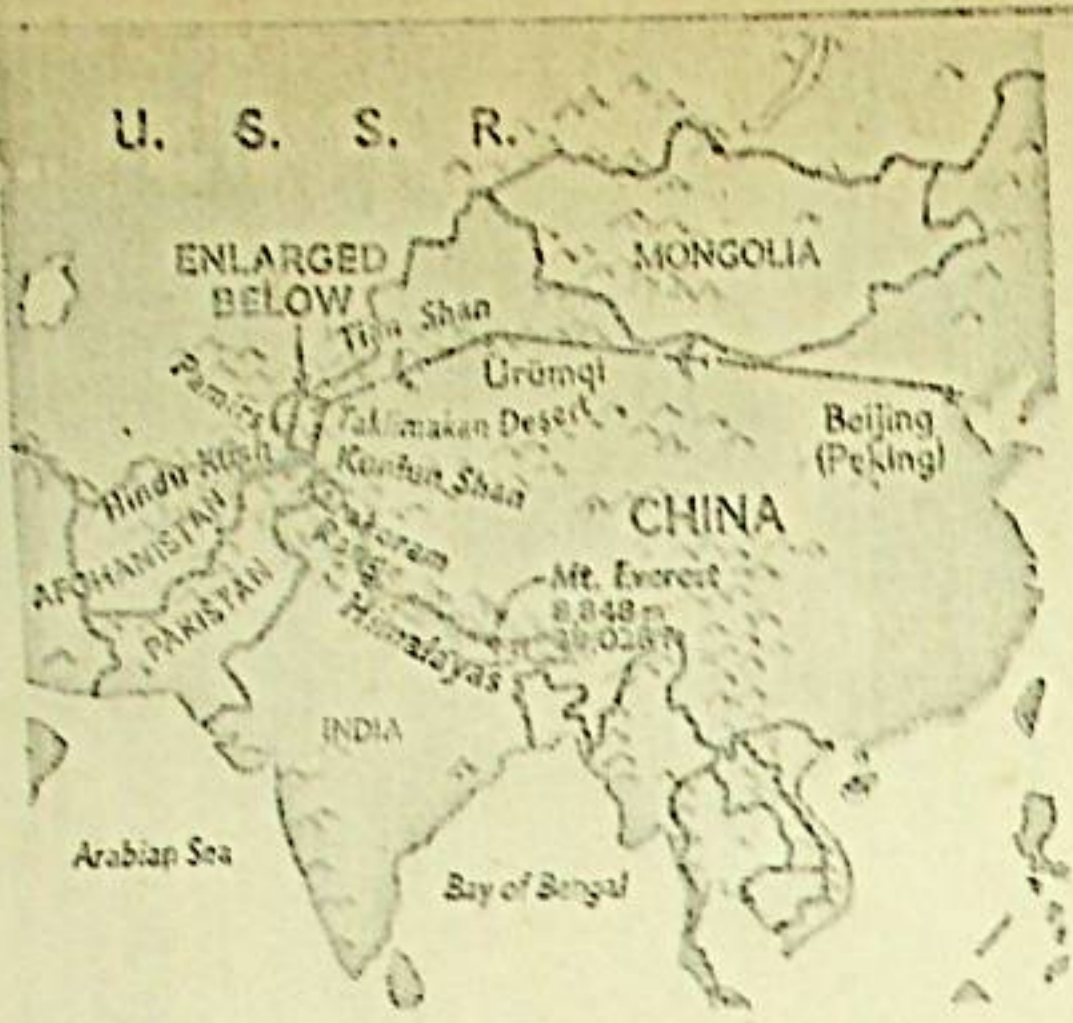
The far west of China's Xinjiang Province, inhabited primarily by people identical in race, language, and Islamic faith to the Soviet Central Asians, is still officially closed to foreign tourists.*

Previously, Western oil technicians have paused in Kashi on their way to the developing oil fields of Xinjiang. A Japanese film crew and a British mountaineering team also have stopped here briefly. But we are the first Westerners since "liberation" in 1949 to spend more than a few days in the streets of Kashi.

*Rick Gore reported on the northern part of the province in "Journey to China's Far West" in March 1980.

Forsaking Siberia centuries ago, Kirgiz horsemen settled in the high valleys near Muztagata—Ice Mountain Father—which the Chinese opened to the American expedition last summer after a 32-year ban to foreigners. These seminomads are related by Turkic language and Muslim religion to the Uygurs who populate Kashi (Kashgar). Regional government is controlled by the Han, China's ethnic majority.

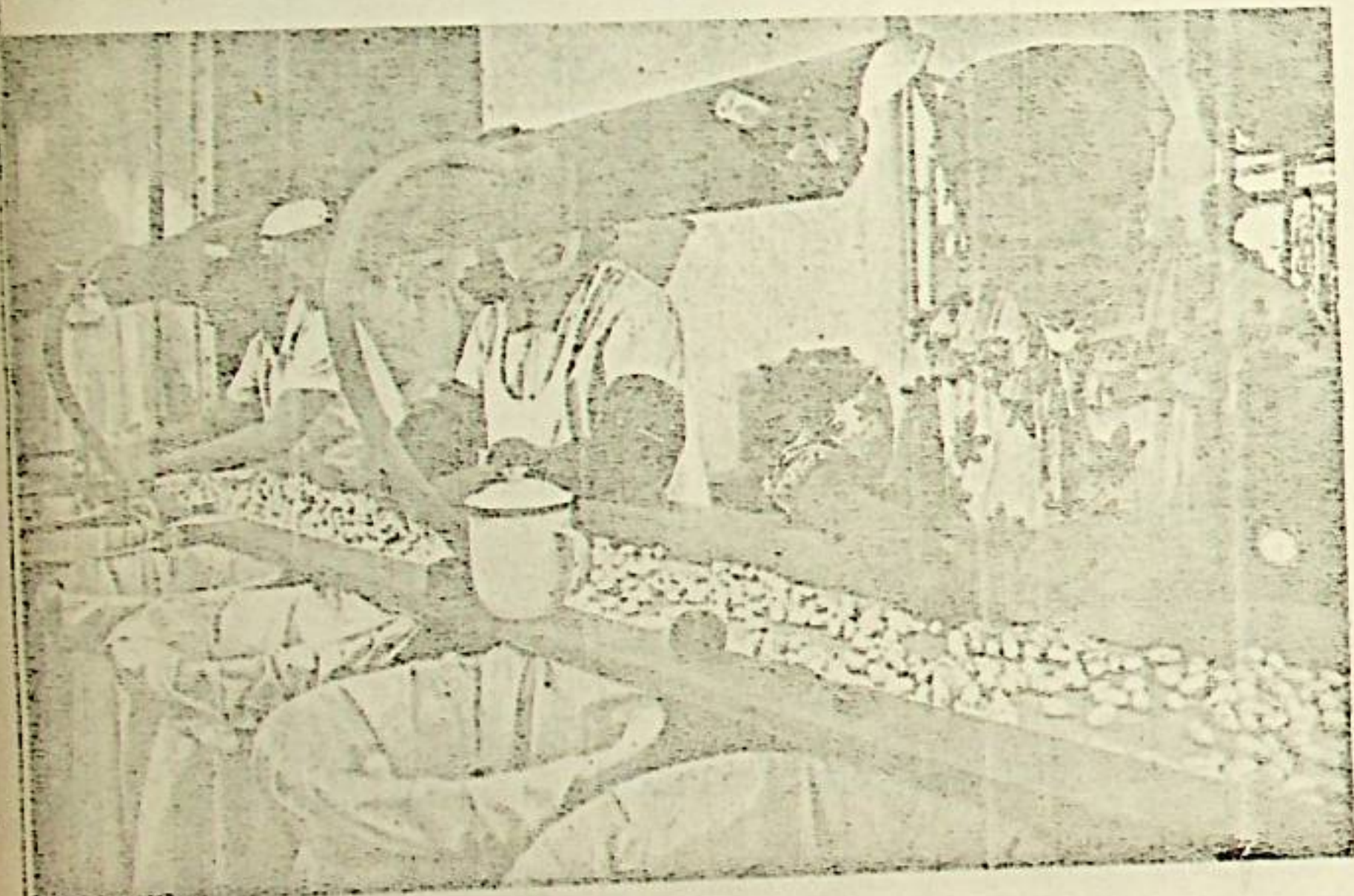
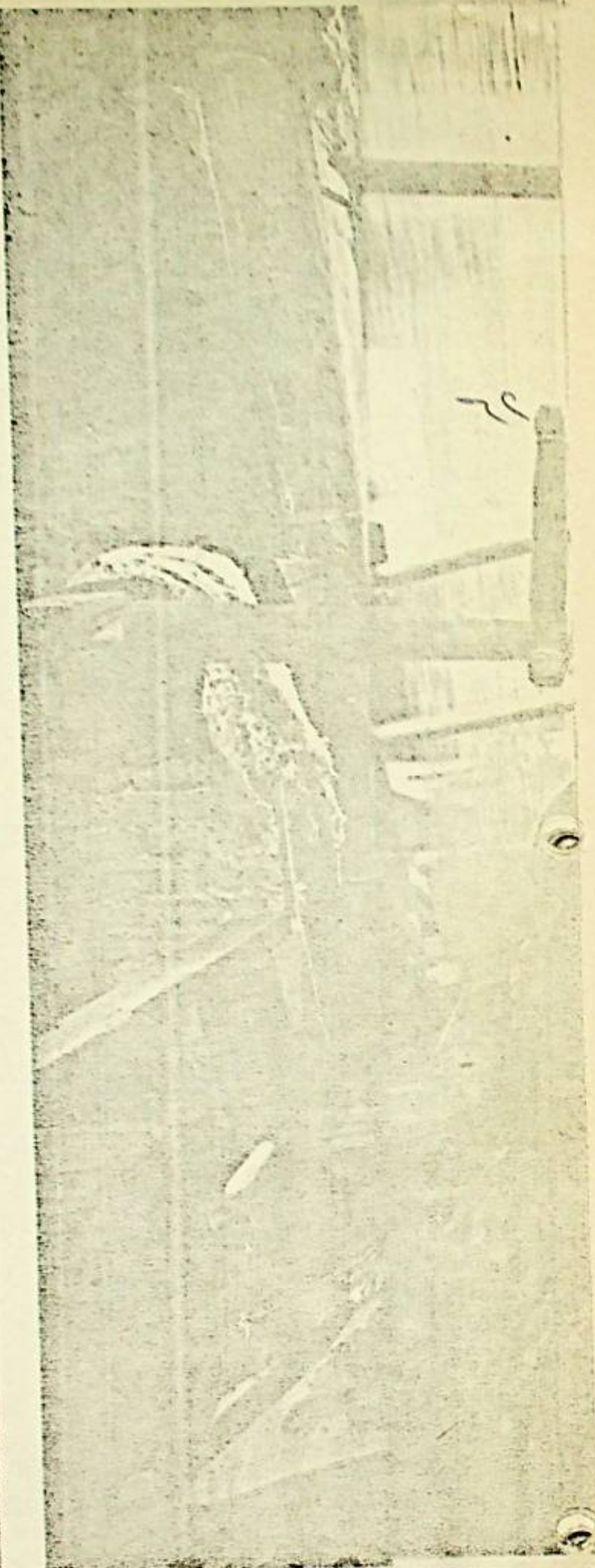
GALEN ROWELL



NED GILLETTE (TOP) AND GALEN HOWELL



Kashi's economic fabric is woven together by money from Beijing (Peking). The government has poured millions into this city of 175,000 near the U.S.S.R. border, building hospitals, schools, parks, stores, and light industry to aid minority development. Workers at the state carpet mill (right) can earn higher-than-average wages for their exacting skills. A nearby cotton-textile plant employs 3,000. At the Handicraft and Arts Workshop (left), a seamstress fashions a souvenir for future visitors to this shop along the ancient Silk Road. Thread is spun from silk cocoons being sorted in a small commune (below).



Dick Dorworth, 41, former world speed-skiing record holder, is our number one skier. Galen Rowell, 39, is one of America's best known wilderness photojournalists and a noted mountaineer. Jan Reynolds, 24, is a ski instructor in Vermont. Jo Sanders, 31, handles our travel arrangements, and Cameron Bangs, 43, is our doctor. I am 35 and the expedition leader. My specialty is skiing in exotic places—adventure skiing, I call it.

The team raised, in only two months, the necessary funds to come here. The Chinese

are blunt about the high cost of expeditions in their country: The government needs the foreign exchange.

The mountaineering association has assigned us a vibrant mountaineer for a liaison officer, Chu Ying Hua. We grow extremely fond of him. Gone are all ten of his toes, lost to Mount Everest (Qomolangma) on the 1960 Chinese expedition. One of three climbers to reach the top, he traded his toes for his country's honor.

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National Geographic, February 1981



JAN REYNOLDS (TOP LEFT) AND GALEN ROWELL

"given by Premier Zhou Enlai," he says. "I would have died rather than fail. Near the summit we could not climb the 'second step.' It was too steep for our clumsy boots. I finally took them off to get closer to the rock."

Horses Prompted Chinese Interest

During the past 2,000 years Chinese dynasties occasionally have extended their rule to the distant west, pushing back Huns, Turks, Arabs, Tibetans, and Mongols. Chinese interest in Kashi began in the second

century B.C., when the great Han Emperor Wu Ti, intent on defeating marauding Huns, sent to Fergana in what is now the Soviet Union to arrange a tribute of the fabled horses that "sweat blood and originate from the heavenly horses."

Trade caravans followed. Commerce flourished in times of peace, which were frequently interrupted by civil strife and invasions. Both Genghis Khan and Tamerlane fought to control the strategic trade routes in this region.

Silk was the lure. Emissaries and monks as well as merchants traveled the Silk Road between Cathay and Persia and Rome. Kashi, situated between the wastes of the Taklimakan Desert and the peaks of the Pamirs and the Tian Shan, became a bustling emporium of diverse cultures and goods.

Modernization Comes to Kashi

Today Kashi is still a melting pot of time and culture, but insulated from modern Western influence. Thirty years ago the population of Kashi was only 40,000; now it is 175,000, mostly Uygur. But the economy remains largely agricultural, and the Uygurs are still people of unhurried industry. In this moderate climate, with plentiful snowmelt for irrigation, the fertile soil provides an easy living for the people even without mechanization.

The Chinese have put substantial effort into the city. The 50-foot wall that once surrounded the center is gone. Big, unimaginative edifices built in the 1950s house

department stores, shops, and offices. Our hotel, the Welcome Guest House, is comfortable, richly carpeted with bright, exquisite rugs. Cameron and Dick share their bathroom with a resident frog.

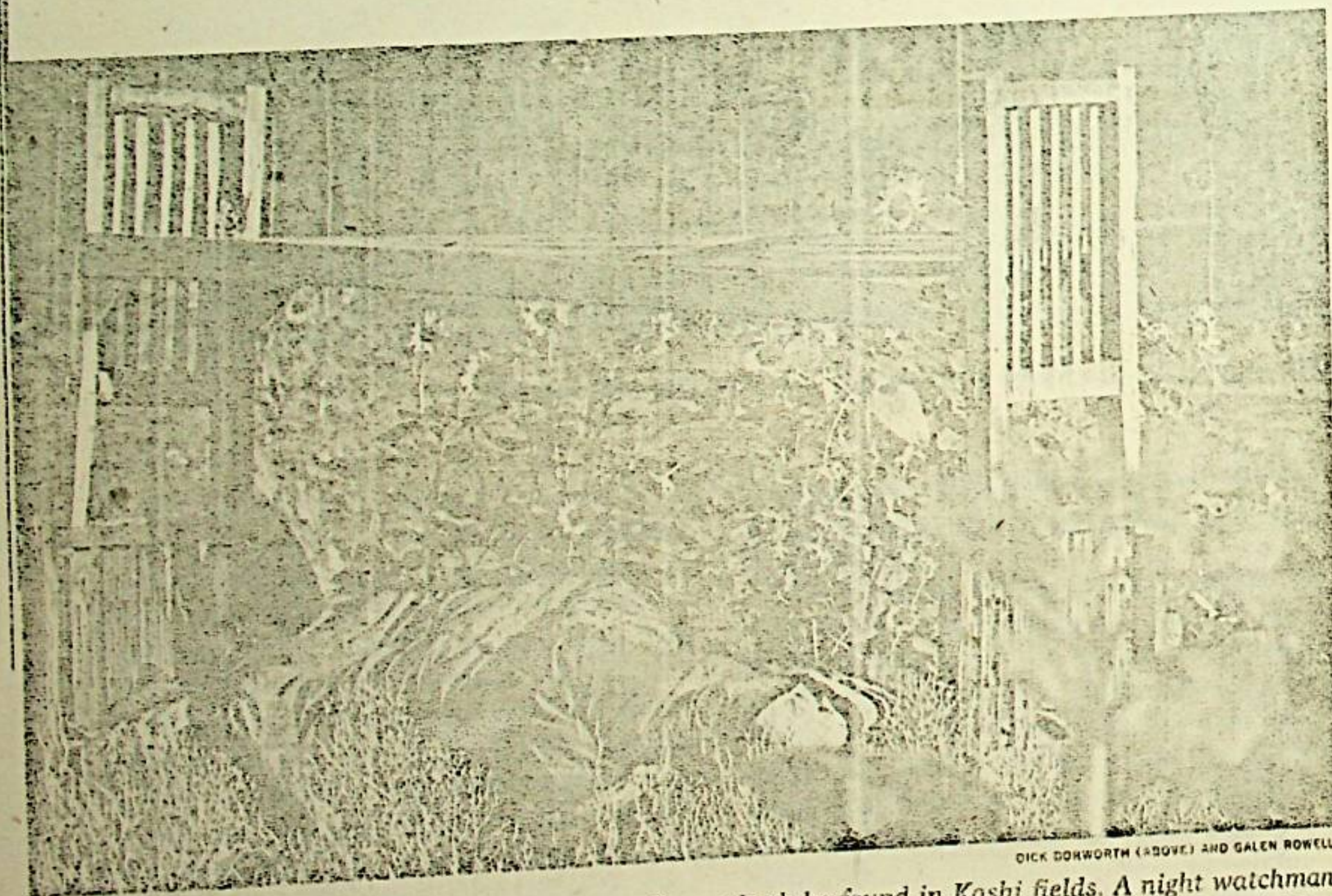
For many the standard of living has been raised, and literacy has increased. Kashi is remarkably free of poverty. The Chinese are proud of what they have accomplished here. Chu reprimands me only once.

"*Bu ke qi* [Not OK]. The dark angle of old, ugly, or beggar people is not for your camera."

"I'm sorry," I reply.

"One never has to say I'm sorry among mountaineers," he answers. "Only among politicians."

The hand of the late Mao Zedong (Mao Tse-tung) sweeps over Kashi's Peoples' Park from his 100-foot-high concrete eminence on the low skyline. Although a numerical minority in the province, the Han Chinese firmly control top positions in government, agriculture, and industry.

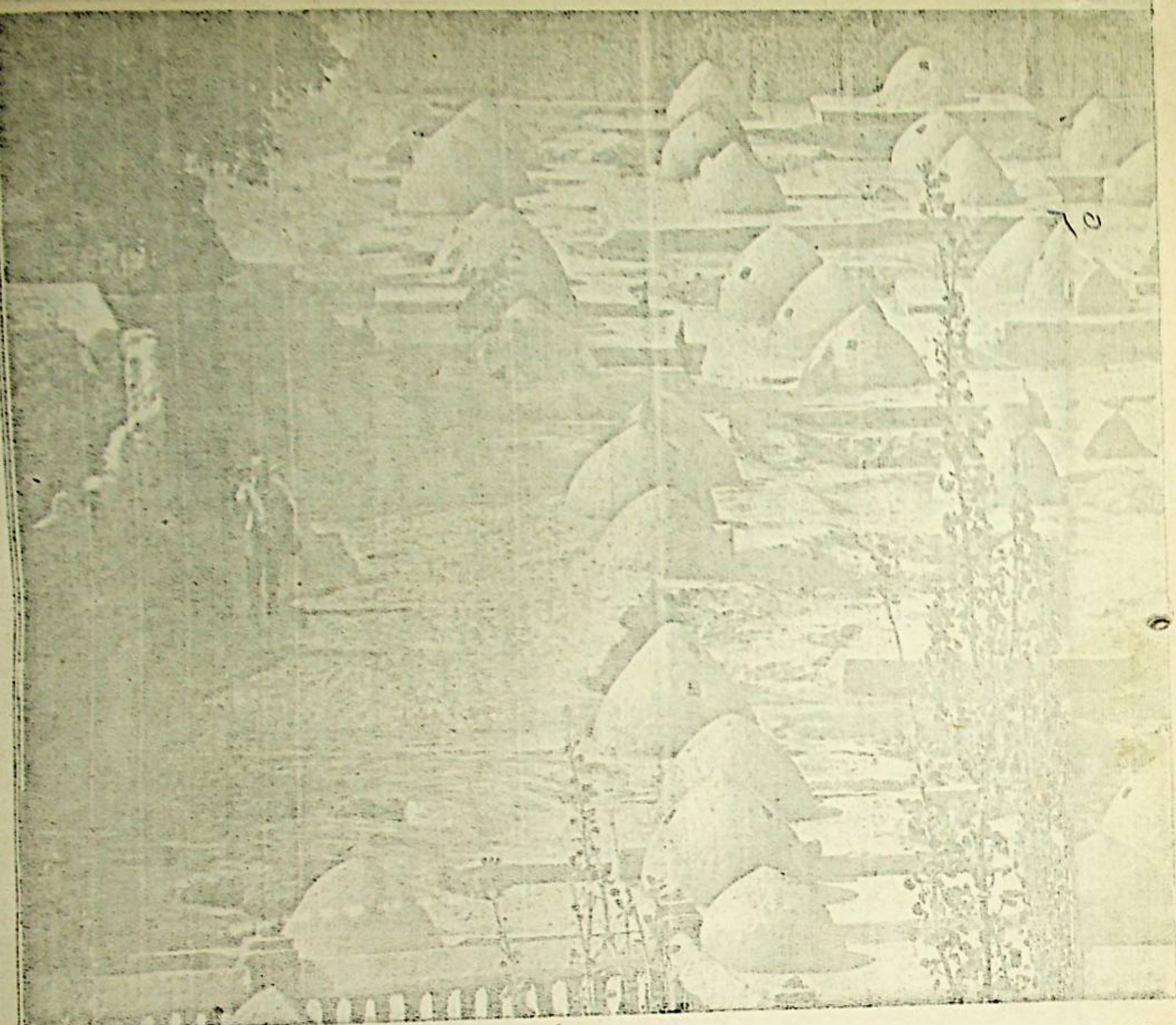


DICK DORWORTH (ABOVE) AND GALEN ROWELL

Cabbageheads and sleepyheads can both be found in Kashi fields. A night watchman (above) snoozes his morning away in a patch of melons that grow sweet and juicy with hot days, cold nights, and mountain water from antique canals. A sunny Uygur girl (right) helps her family at one of the communal farms, which also grow cotton and wheat.

J. N. W. C. G. A. C. P. G. J. F. C. C. T. M.

R. M. G. E. M. C. G. and ASS. ASS. E. F. AD. L. Ad. Jan. Net. S. L. G. P. son. Rob. Paul. nel. W. Wag. J. M. M. G. C. ADV. 1002. Mam. Chic. Derr. Trav. nest. COP. ton. C. & you. (ISS)



Domed city of the dead, a field of tombs hold Muslim faithful.

Islam

But the flavor of the place is in no way Chinese. We are in an outpost of Islam. Seven of Xinjiang's twelve minorities, including the Uygur, are Muslim. However, they carry their religion easily, with little of the fervor of other Islamic countries.

Although the Beijing government allows religion to be practiced within central mosques, it discourages, sometimes strongly, worship in small mosques built by *akhun*, local religious leaders. Still, we saw several of these being constructed with great care. Many had been destroyed during the Cultural Revolution in the late 1960s.

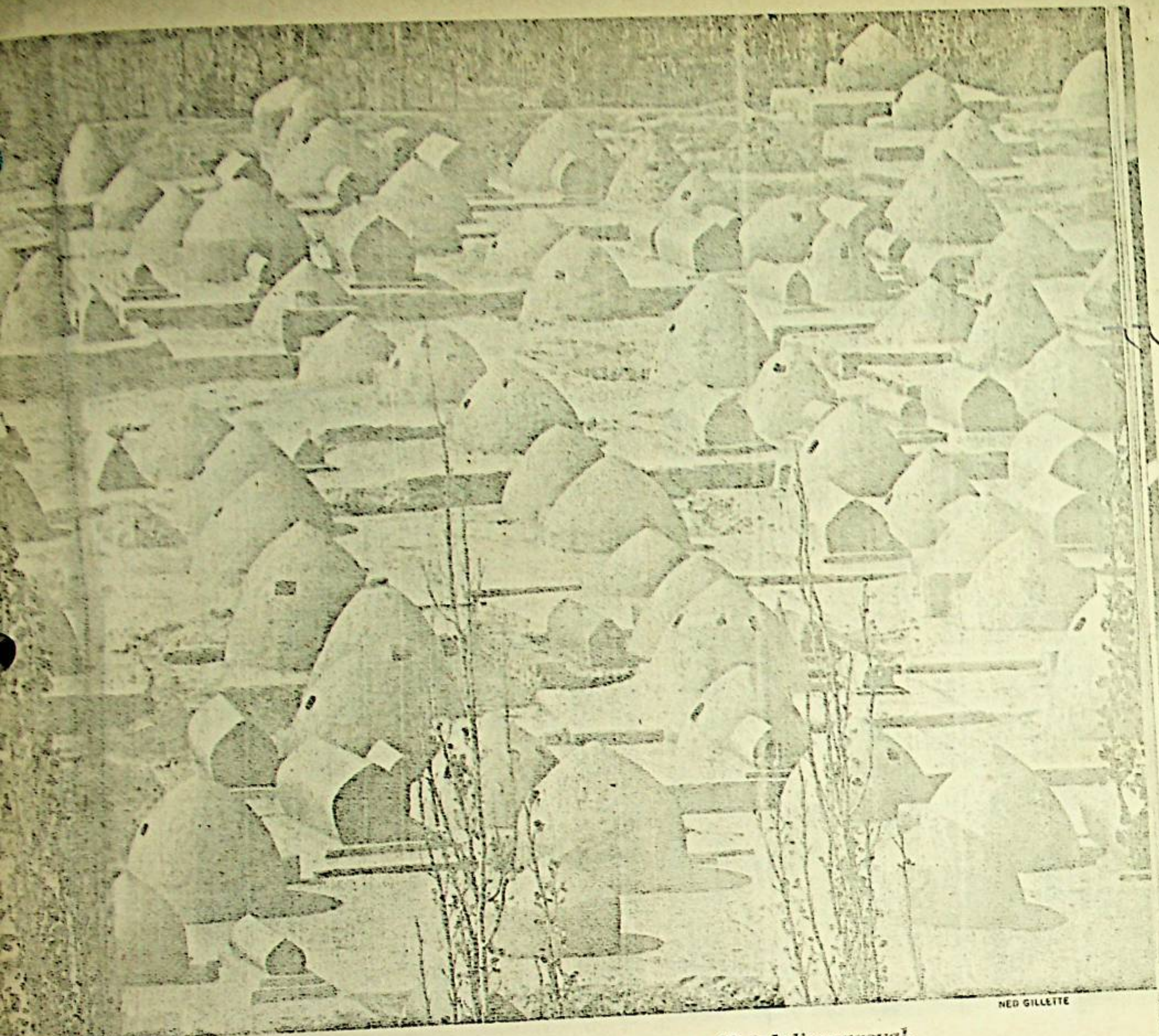
"Given the choice, we would prefer to be a

country with our own flag—Eastern Turkestan," declares one Uygur. "But that may be unrealistic."

One morning we sit on worn carpets in Aziz Aysa's five-room house. Seven years old, it is flat roofed and made of sun-dried mud bricks reinforced with straw—adequate, since only about three inches of rain fall a year. Aziz works at a large commune east of Kashi that grows more than 50 kinds of fruit—melons, pears, apricots, peaches, pomegranates, plums, and *aq alma*—huge white apples. He owns his house. His bicycle, which cost 179 yuan (\$112), stands outside. He wears a watch.

National Geographic, February 1981

Adv



NER GILLETTE

Islam commands the loyalty of many Uygurs despite official disapproval.

His family has lived here for generations. He has six children: Minorities are not subject to the birth-control regulations that encourage Han couples to have only one child.

"*Aomin Allah akbar*—Amen, God is great," Aziz intones. "He has granted us this good meal." We cannot hope to finish the heaping bowls of vegetables, mutton, and thick boiled noodles, called *laghman*, placed before us. Peering village faces vie for position outside the one window.

"Before liberation," our host is telling us, "each family here lived from the harvest of a small plot. Four landlords owned almost all the land around our village of Kukong.

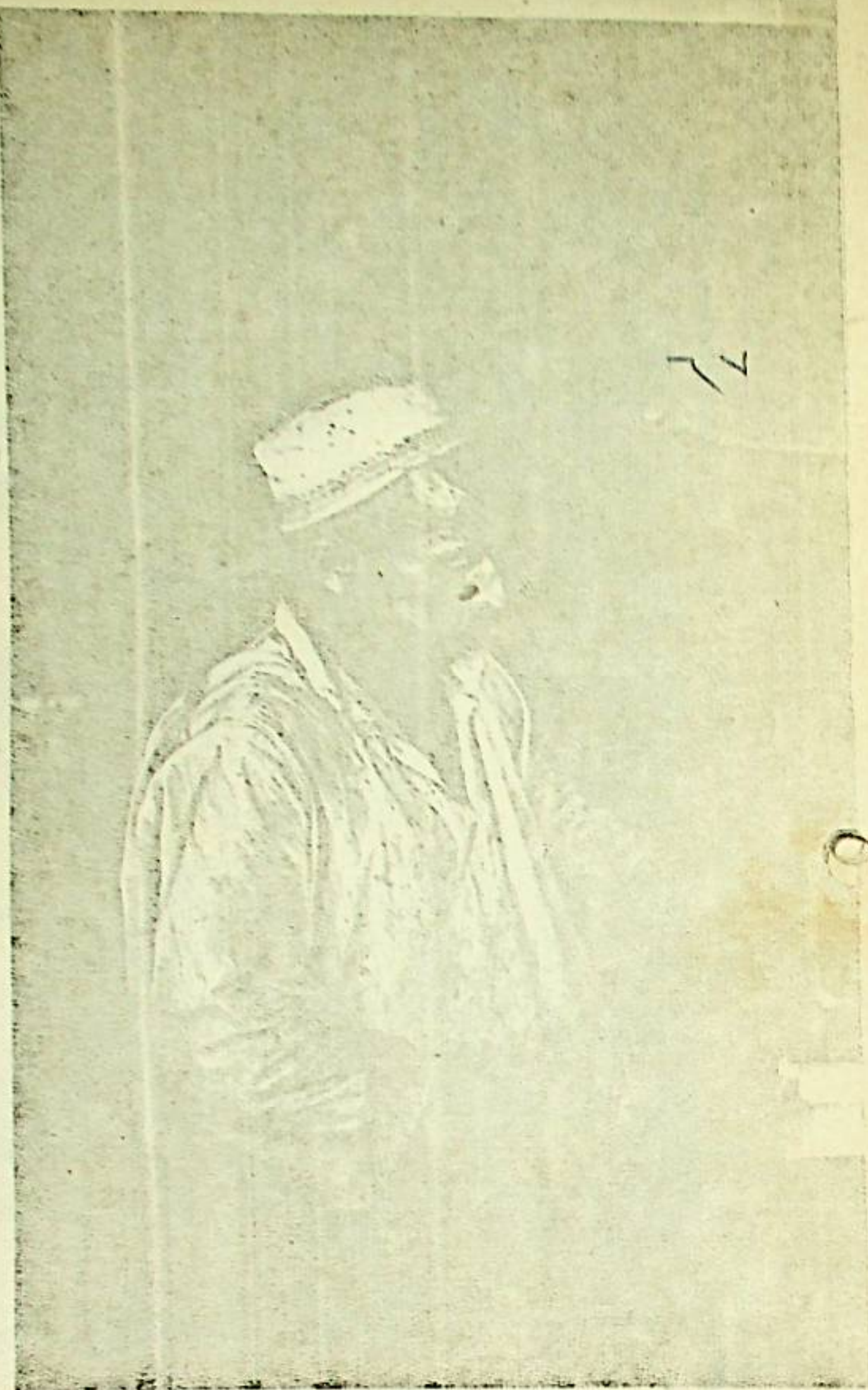
Then, after liberation, the people were gathered together and provided with more free land to grow crops together."

Youngsters Outplay Visitors

We are at a table across from the 40 part-time trainers and coaches of the Sports Federation of Kashi. The reception room is quiet, except for enthusiastic sucking and slurping on plums and melons—the first order of business at any meeting in summertime Kashi.

Han director Kao Neng Ben and Uygur deputy director Qurban Aimet ask us to participate in some Ping-Pong diplomacy. Jan

Enough hands for any job: China hammers out its future with raw manpower. To help make concrete for new mill wheels, a youngster (below) simply breaks big rocks into little ones. At a roadside blacksmith shop (right) a youth forges iron as brother and father puff encouragement in the intense heat. The birth-control-conscious government placates restless minorities by allowing them to raise large families.



and I go down in firm defeat to ten-year-olds Yang Xu and Bai Jang.

Dick and Jo are invited to teach an English class of 150 adults. Five Uygurs sit in the front row—the rest are Han. Knowledge of a foreign language is required for promotion. The choices are Russian, Japanese, and English. Most choose English. Their employers have donated half a day for each to attend the spare-time school. This is the first time they will actually hear a Westerner speak English.

"What does, 'You are pulling my leg' and 'The man was all legs' mean?"

"What is the difference between factory, plant, mill, and works?"

During a break in the English lessons, Jo sings "You Are My Sunshine" to her class.

Dick and Jo are amazed at the range of

questions about their life-style, education, work, philosophy, and political viewpoint.

Wang tells me, "As an interpreter in the old days, three or four years ago, I could only say hello, good-bye, and translate directly. No feeling, no emotion, no humanity was allowed. Now I can talk about all my opinions with foreigners."

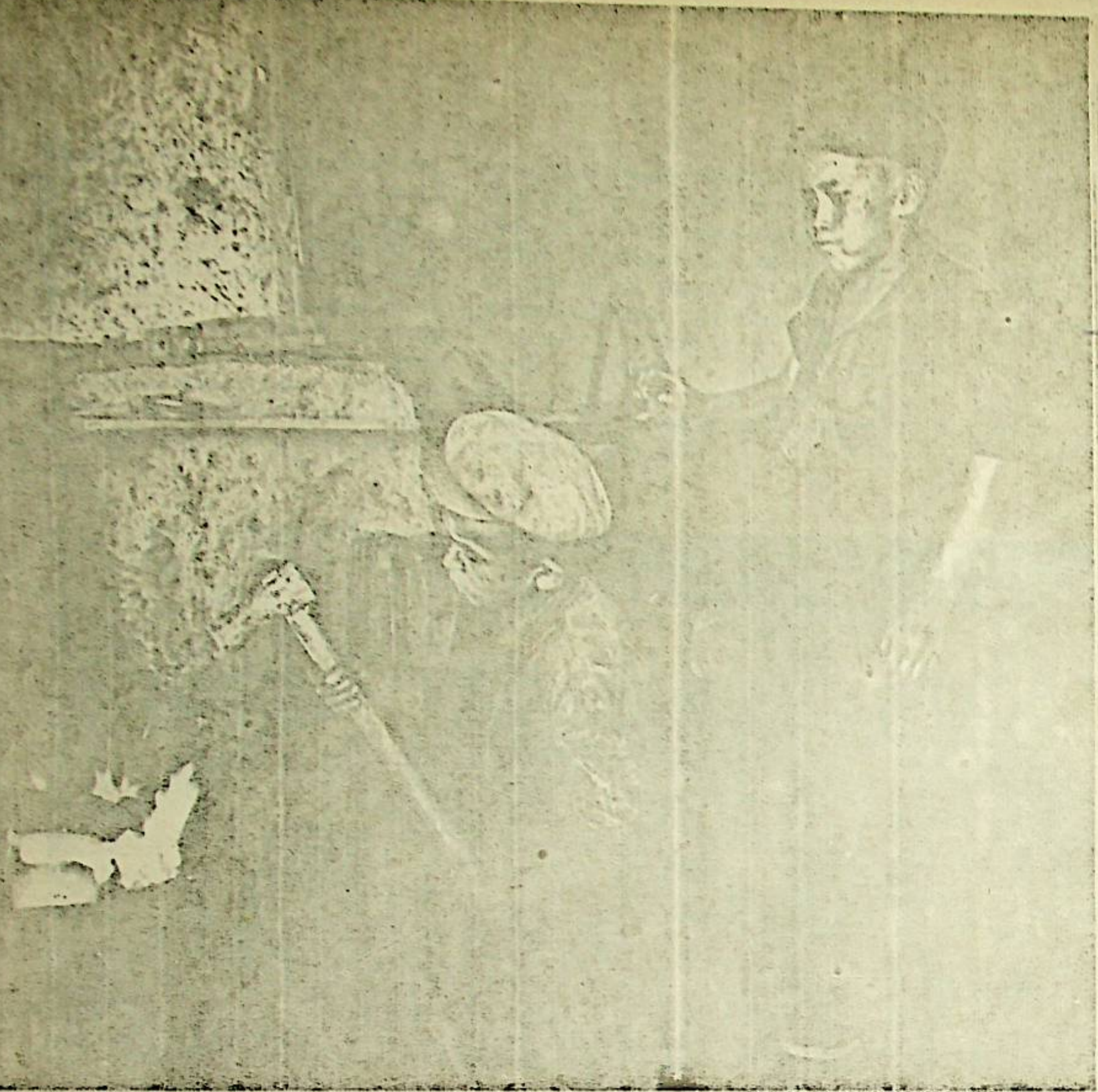
Following Marco Polo's Path—by Bus

En route to our mountain, our heavily laden rented bus inches up the tortuous grade of the deeply notched Gez River valley. We are following the unpaved Karakoram Highway, part of the old Silk Road, 200 kilometers south into the high Pamirs. Marco Polo had traveled this same road 700 years earlier, over what the Persians called the "Roof of the World."

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GALEN ROWELL (ABOVE) AND NED GILLETTE

The Pamirs, which include Muztagata—Ice Mountain Father—are an intricate jumble of icy peaks at the borders of China, the Soviet Union, and Afghanistan. From this hub issue the world's greatest mountain ranges: the Himalayas, Karakorams, Hindu Kush, Kunlun Shan, and Tian Shan.

As we lumber along, gaining altitude, the landscape is bleak and forbidding, largely empty of humanity. In vain we have been scanning the mountainsides for wildlife: the elusive snow leopard, bear, wolf, ibex, and Marco Polo sheep.

Above 11,000 feet the highway flattens as we enter a long valley. Of the major Pamirs, meaning "high, wide, grassy valleys between mountains," this is the only one within China's boundaries. The road runs within ten miles of Soviet territory. The boundary

is a hazy line, still in dispute. Perhaps one reason we are allowed here is to lend credibility and exposure to China's claim of sovereignty over this territory. American mountaineers have also climbed in the Soviet Pamirs across the border.

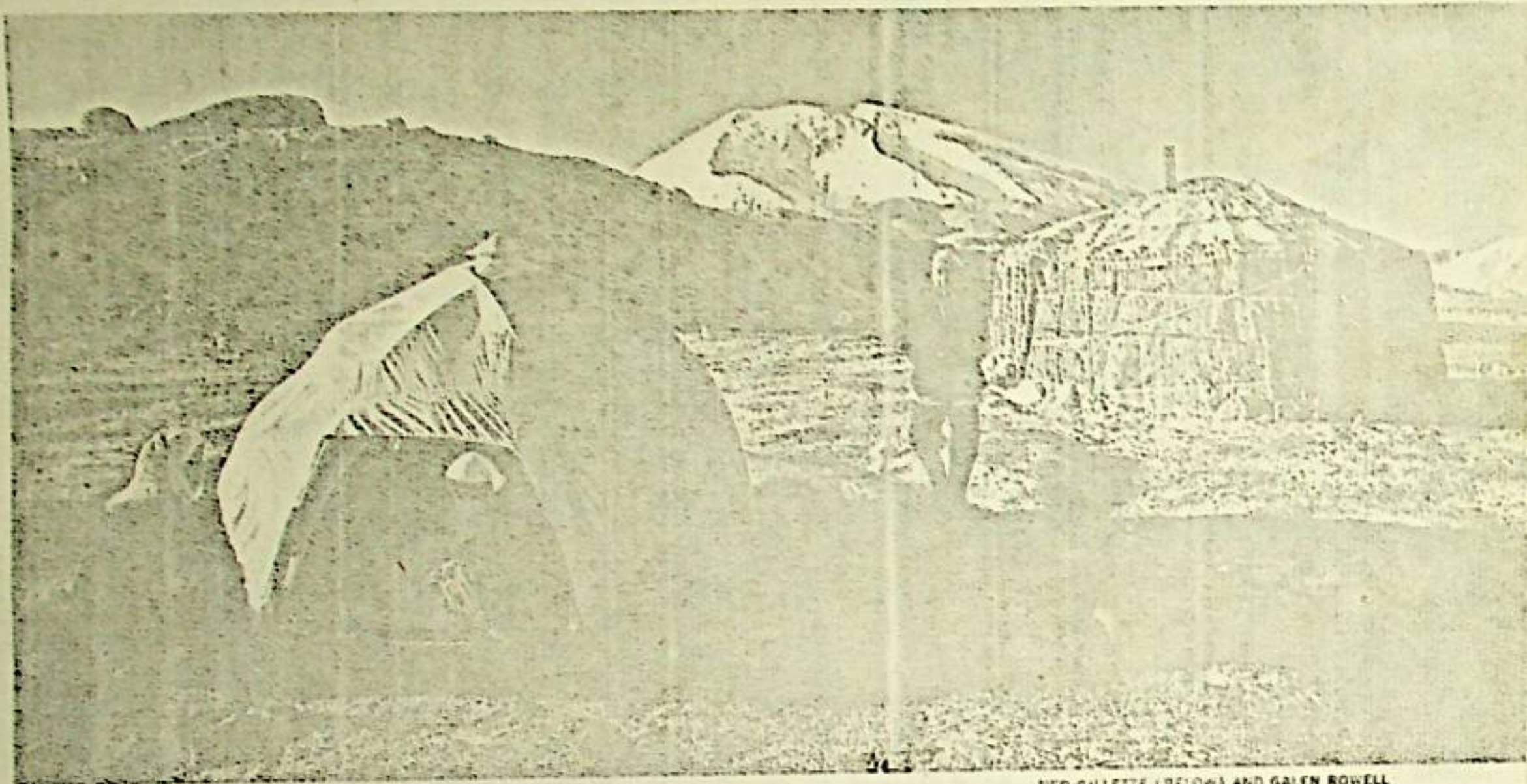
Marco Polo wrote of high valleys so lush that "a lean beast grows fat here in ten days." As we crest a rise, such a place spreads before us. Meadows carpet the broad valley floor, dotted with purple and yellow flowers. Sheep and goats shepherded by Kirgiz mountain nomads graze by a meandering stream. The mud walls of the village of Subashi grace the far shores of Little Karakul. Yurts, or *aq ui* (Turkic for "white dwellings"), which provide summer shelter, squat like giant mushrooms. Above barren hills and gigantic

(Continued on page 192)

Friendship followed trading of stories, food, and jewelry when the skiers visited Kirgiz nomads at the base of Muztagata. Welcomed into the felt-covered yurt of Turdi Beg (left, at right), the Americans ate flat bread, yogurt, and goat cheese with his family and friends. Later the visitors showed off their mountain tent of nylon and aluminum (below) and shared freeze-dried "ice cream." The herdsmen tend state animals along with their own

on summer grazing areas assigned by their brigade leader. Yet in most ways their lives resemble those of their grandfathers. "I felt quite at home when the women milked the goats," said Jan Reynolds (bottom, left), who grew up on a Vermont dairy farm. Turdi's wife, Tur-sunai, at right, gave her a pair of Kirgiz earrings to try on. "But she never really believed that a woman could climb the mountain," Jan said.

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NED GILLETTE (BELOW) AND GALEN ROWELL



(Continued from page 187) sand dunes rise Muztagata and the Kongur Shan: massive, glacier laden, the highest of the Pamirs. Their alluvium fills the valley floors, and the waters that flow from them give life to the distant desert oases.

The splendor and peace of the summer landscape take us by surprise. We have heard that the ceaseless winter winds are among the cruelest outside the polar regions.

A Kirgiz horseman races our bus. Dressed in black corduroy, high black boots, and black wool hat, he gallops with ease. Our mechanical horsepower is no match for his at this altitude.

At the base of Muztagata we dump our gear, set up camp in the meadow, and spend several days getting used to the altitude.

Kirgiz Settle Into New Ways

The Chinese have effectively incorporated the Kirgiz into the communal system. Though it is no longer possible to roam at will, old traditions persist. The Kirgiz are Mongolian in appearance but speak a Turkic dialect and write in Latin script. They are now "settled" nomads.

Subashi *qishlaq* (winter village) numbers 700 people. Seventy still go out to *yaylaw*, or summer grazing grounds; two or three camels carry one family's possessions.

We visit the yurt of 55-year-old Turdi Beg, sitting on brightly colored quilts made by Turdi's wife, Tursunai.

"When I was a young man," he says, "only a horse path led to the outside, and it was difficult to exchange wool for flour, salt, wood, and cotton cloth. In the old society few could read. Many children died before one year. There was nothing for us, not even our own tent. Now we work for ourselves and are happy."

Outside, slopes of icy peaks catch the last of the light; silent white snow turns amber.

"For generations we regarded Muztagata as the highest mountain in the world," says Turdi. "Now we know it is not. But we still regard it as the best, because it gives water for our animals.

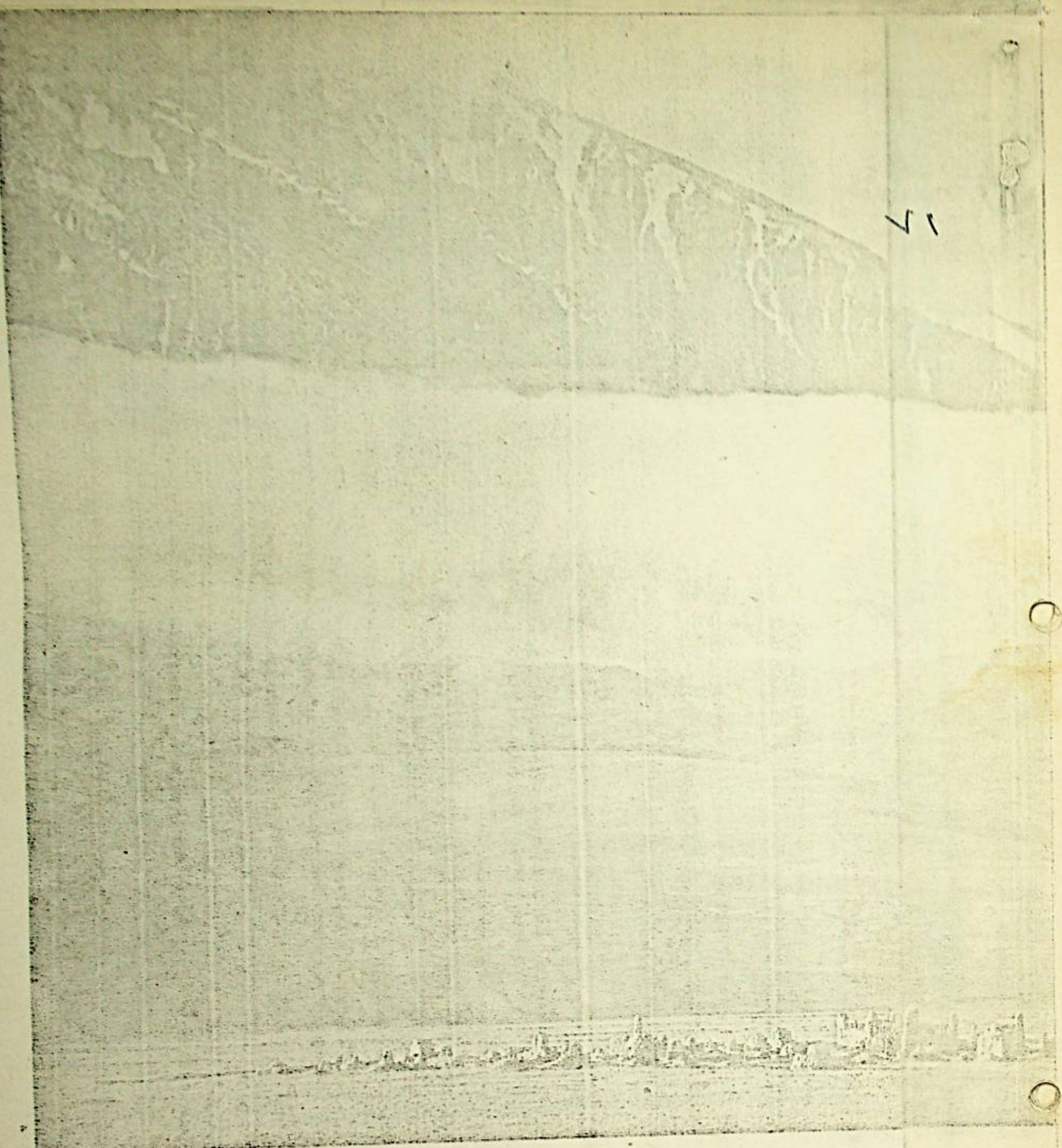
"My grandfather told me that there is a beautiful garden on top where white-robed saints live in peace and harmony. Please . . . tell me if that is true when you climb the Ice Mountain Father."

Skiing From the Summit of China's Ice Mountain

*Author Ned Gillette
leads an American
team to 24,757 feet in
the highest ski ascent
and descent in history.*

*First to the top,
climber Galen Rowell
snaps a self-portrait
of his wind-and-sun-
shielded face.*

GALEN ROWELL



MORNING CLOUDS linger above an old Kirgiz graveyard (*above*) near road's end at the base of Muztagata, where we establish our meadow camp. We are skiing writer Dick Dorworth, wilderness photojournalist Galen Rowell, ski instructor Jan Reynolds, cold-weather specialist Dr. Cameron Bangs, Jo Sanders, who made our

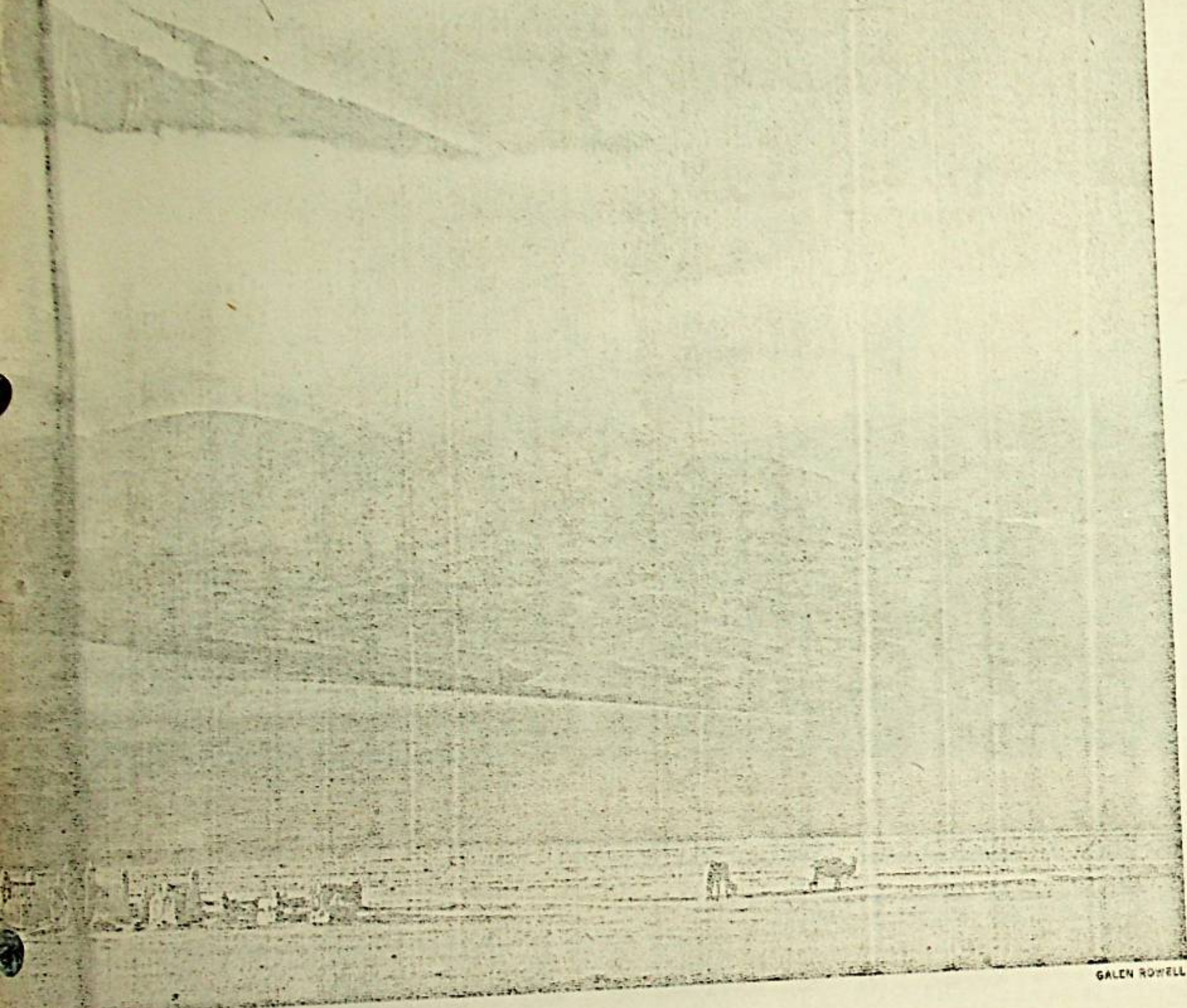
travel arrangements, and myself. Only twice before has Muztagata been climbed: first in 1956 by a Sino-Soviet team, then in 1959 by a Chinese expedition. In four attempts in 1894, Swedish explorer Sven Hedin failed to reach the summit, as did Englishmen Eric Shipton and H. W. Tilman in 1947. The great whale-backed slope gives climbers little encouragement as

they charge hour after hour, their gear dragged and unlearned. "Tains are We are strategy snow as lightweig

National Geographic, February 1981

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GALEN ROWELL

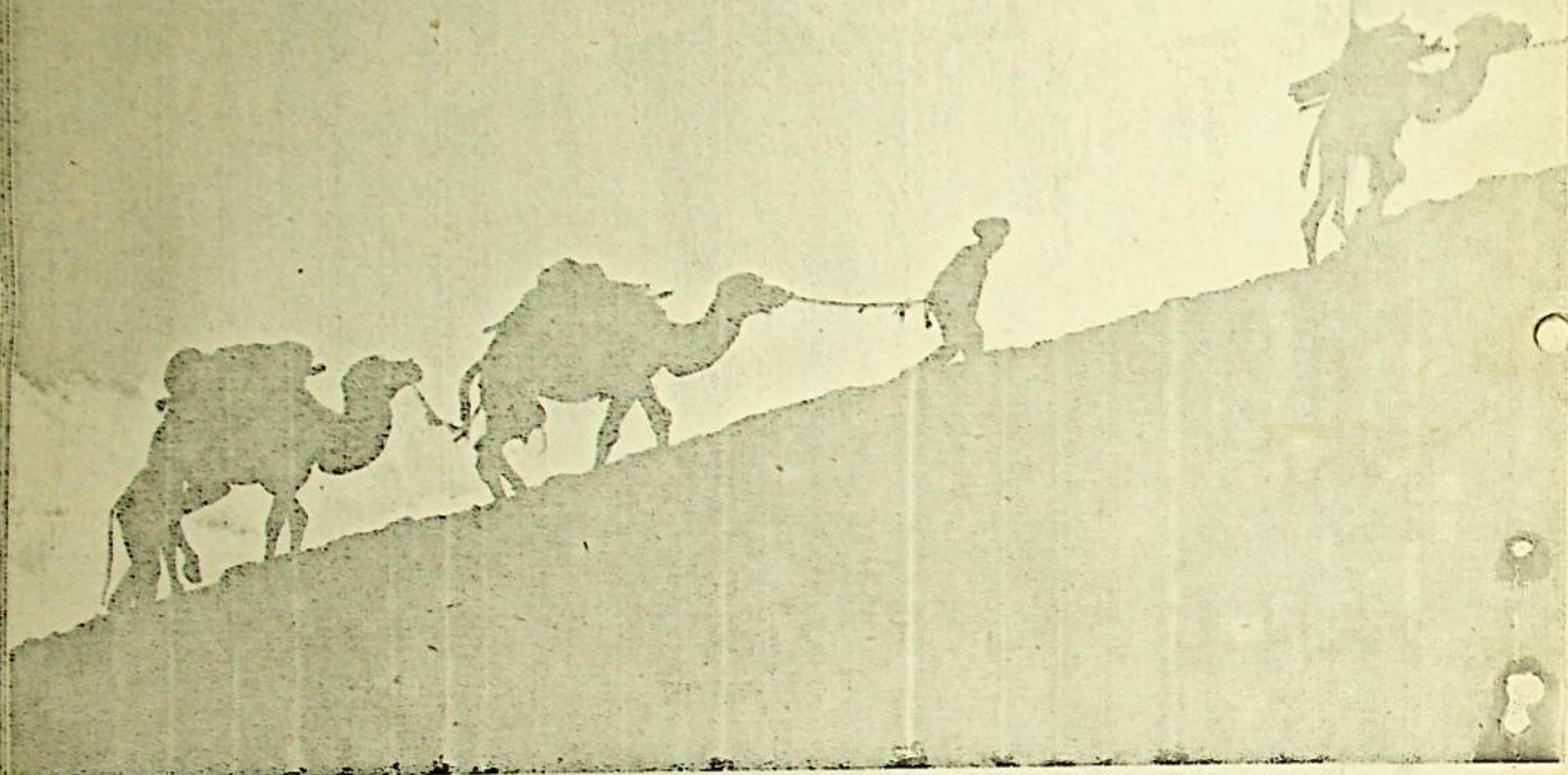
they chase the same unchanging horizon hour after hour, all the while being dragged down by deep snow, thin air, and unexpected cold. "We live and learn," Tilman wrote, "and big mountains are stern teachers."

We are skiers, however, and our strategy is new: to stay on top of the snow as we make our ascent. Our lightweight alpine skis are equipped

with mountaineering bindings that hinge at the boot toe for easier climbing. Their bottoms are fitted with artificial sealskins to better grip the snow. We'll ascend the first half in stages, getting accustomed to the altitude until we reach our high camp—almost as high as Mount McKinley. Then we'll dash to the top in a single, demanding push.

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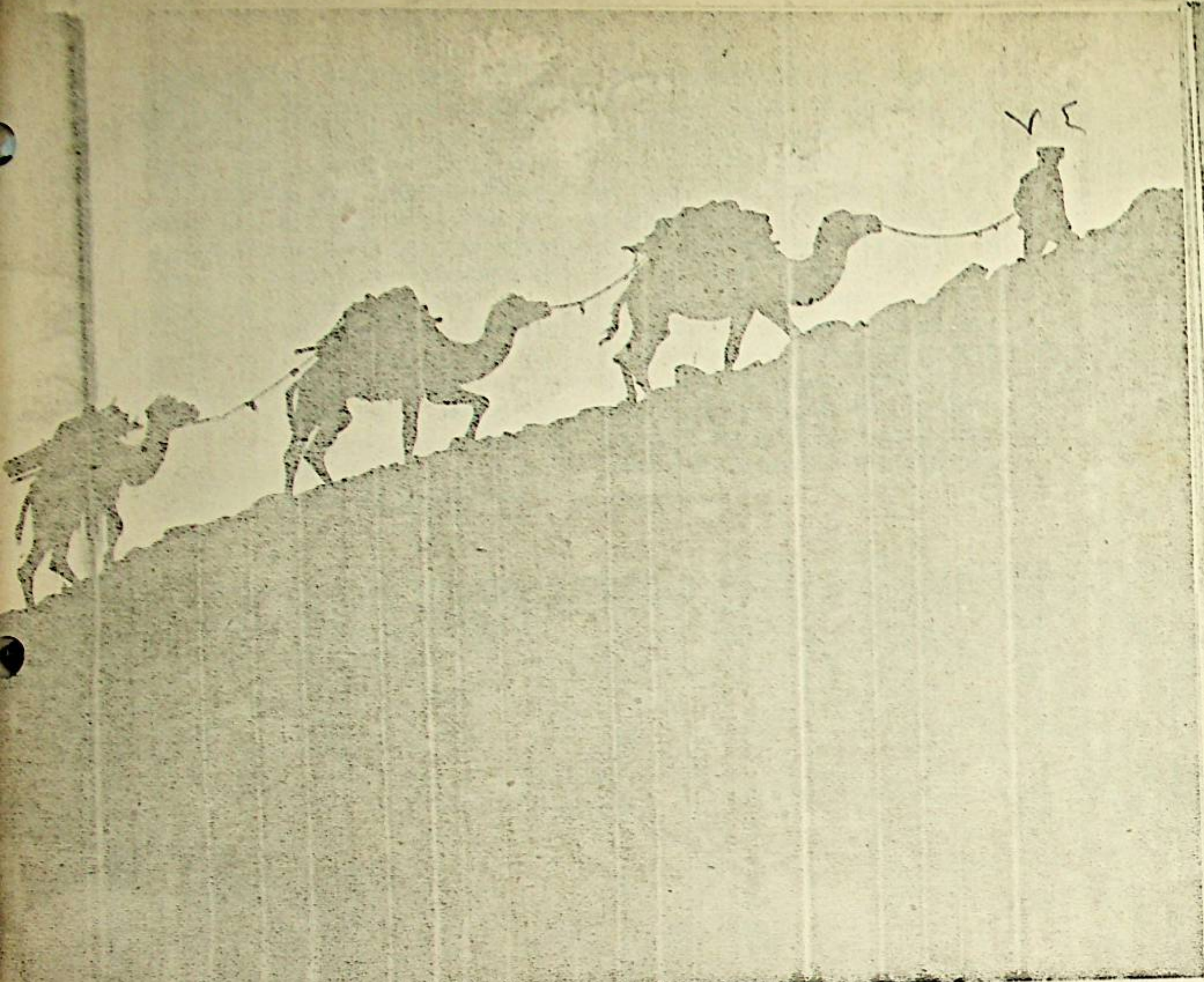
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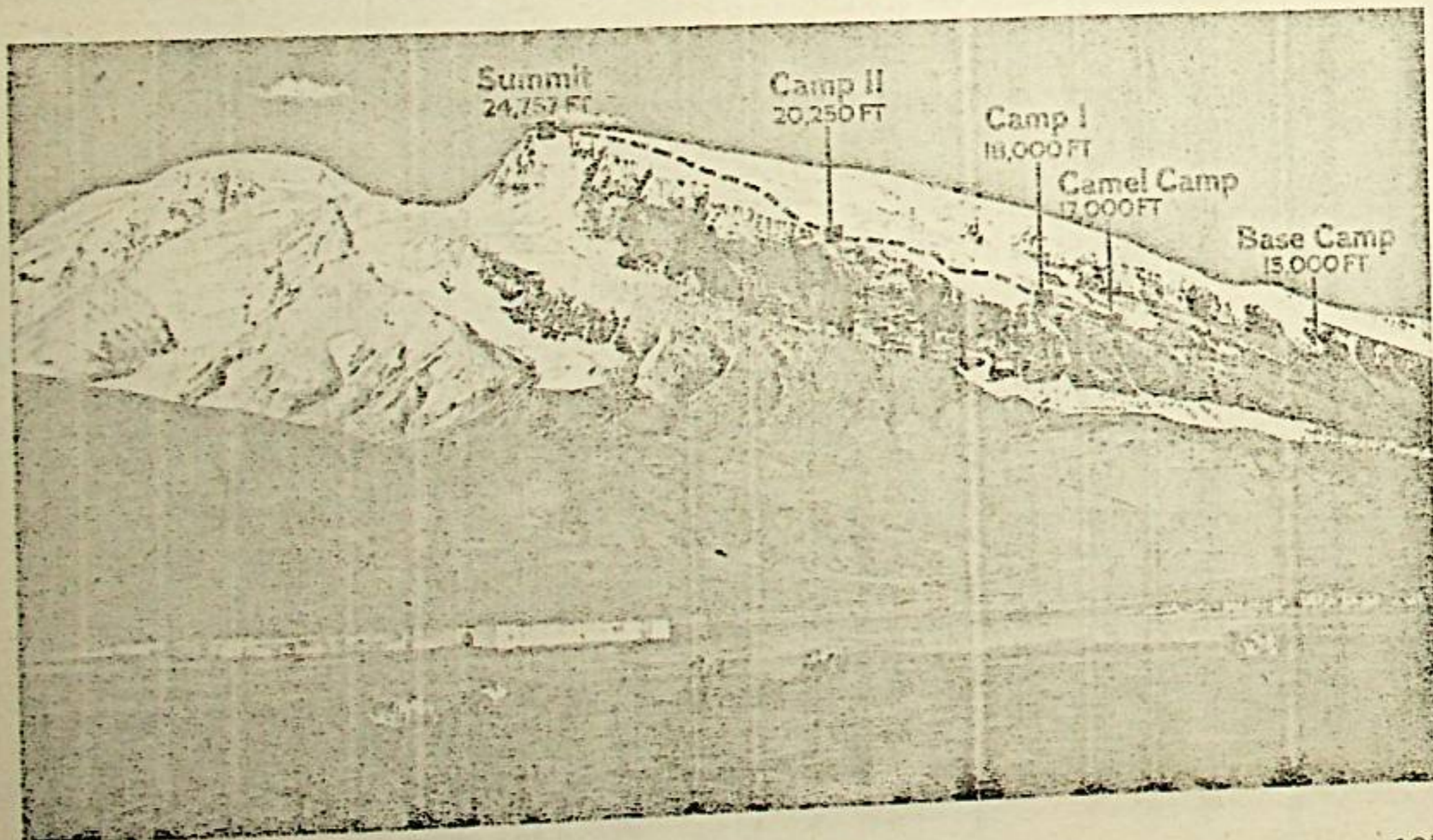
An improbable caravan begins the trek to the top



DESERT MOOSE, as we affectionately call them, Bactrian camels haul skis, food, and gear (above) to the snow line at Camel Camp (right). Interpreter Wang Wei Pei (left) helps a Kirgiz camel driver fasten the unlikely cargo to an animal's back. We carry our own loads to Camp I at 18,000 feet and to Camp II at 20,250 feet, waiting out snowstorms on the way. But altitude sickness forces Dick to descend from Camp I, and exhaustion halts Cameron at Camp II.



ALL BY NED GILLETTE



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REACHING THE TOP won't be the only prize for us. Others have been there before, including our mountaineering friend Chu Ying Hua, here (*left*) with Wang, right, Jan, and me. More than the summit, we seek the thrill of skiing down, of floating across this immensity in hauntingly perfect snow.

So we set out from Camp II (*below*) on July 21, 1980, on a grueling ten-hour charge to the top. But the receding horizon taunts us throughout the day. In a race between exhaustion and coming nightfall, I recall that none of us has ever climbed so high before.

Two hours before dark, however, Galen makes a final, painful push, and at last reaches the summit. Jan and I follow. And for a moment, at the top, we revel in the view—an orange sun easing behind the Soviet Pamirs as golden shadows rise up the slope to meet us. Then we push off for the downhill run atop eight inches of powdery snow. Jan (*below left*) sets a new altitude record for women skiers. And we slip into the instinctive rhythms of survival skiing. By the time we reach Camp II, darkness is nearly as complete as the smooth, deep satisfaction we share. □

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VED GILLETTE (BELOW), CAMERON BANGS (TOP LEFT), AND GALEN ROWELL



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OFFICIAL JOURNAL OF THE NATIONAL GEOGRAPHIC SOCIETY WASHINGTON, D.C.

Journey to China's Far West

By RICK GORE

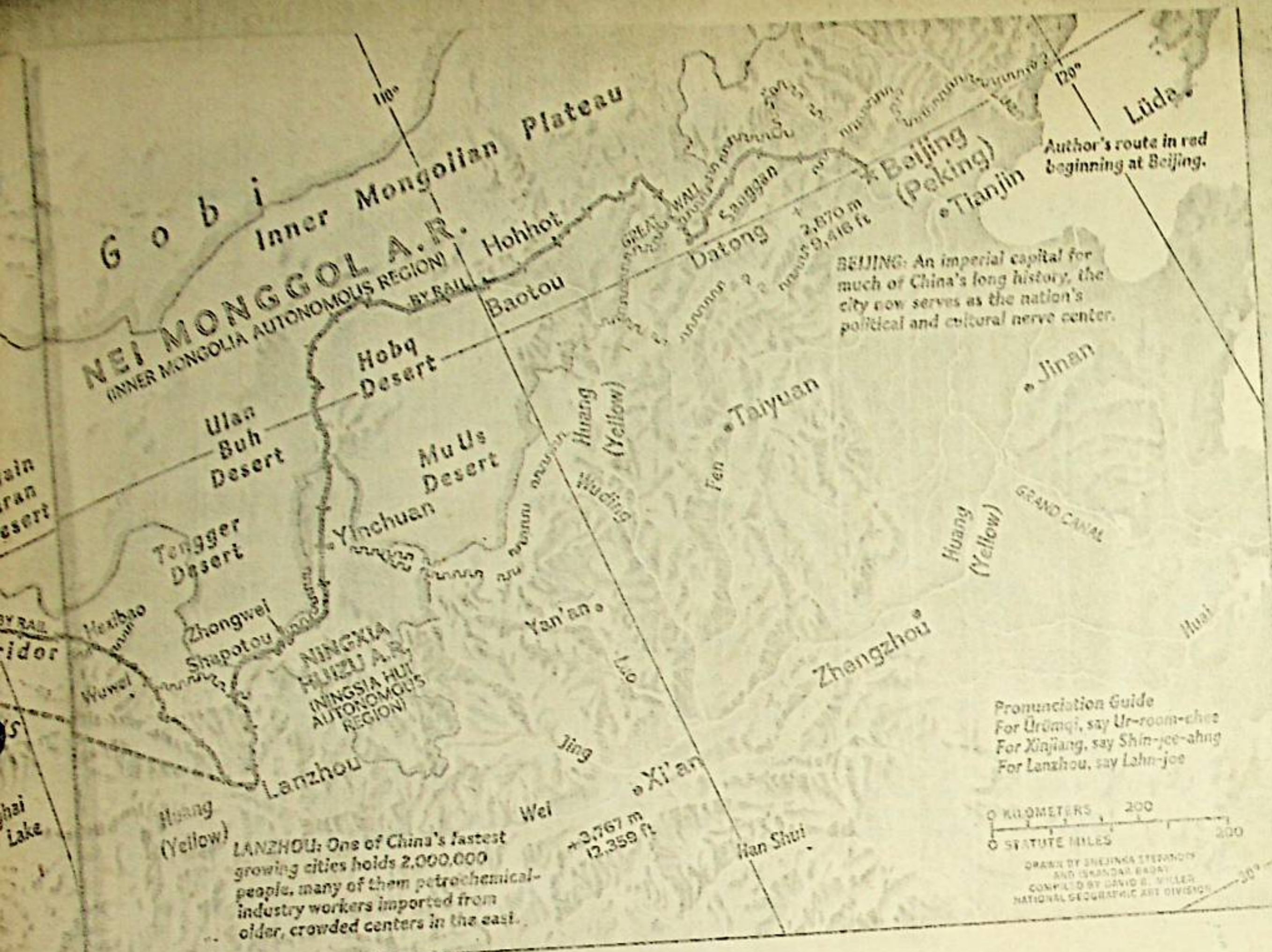
Photographs by
BRUCE DALE

BOTH NATIONAL GEOGRAPHIC STAFF

FOR DECADES China has presented a mask to Western eyes. Now openness is growing as official attitudes relax. When a National Geographic Society team of scientists crossed the breadth of north China last summer, they met peoples like these Uygur (Uighur) oasis dwellers (right), a Muslim minority in a nation united under Communist rule. Celebrating the 30th birthday of the People's Republic of China, torchlit relay runners (overleaf) follow the route of the 1934-35 Long March made by Mao and his followers when near defeat.

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VN

planting seeds from the wax-producing jobo-plant, a pet project of his, across those dunes to make them economically useful.

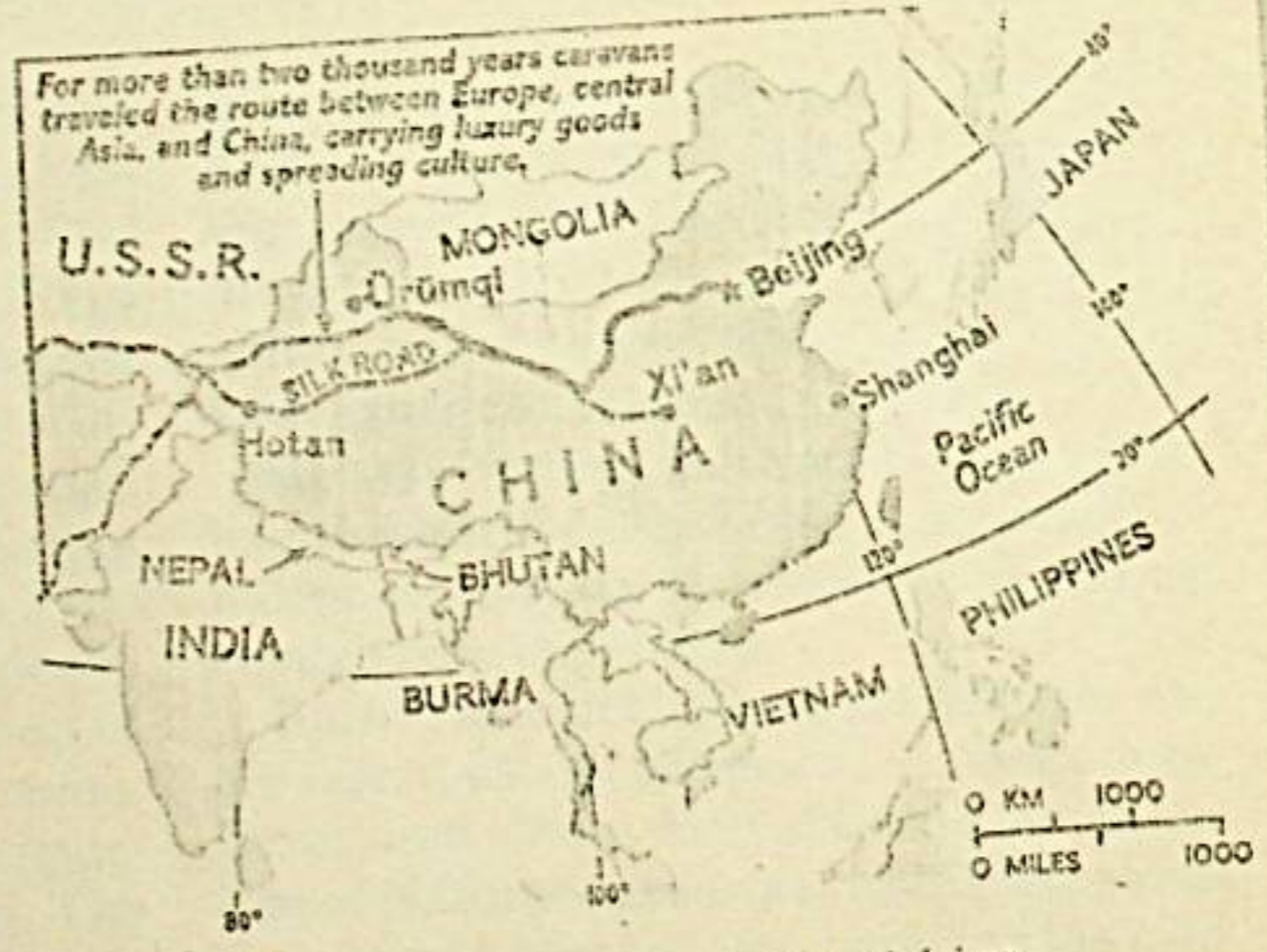
Bob Ford, a cultural ecologist from California's Loma Linda University, would like to spend most of his time in Chinese villages, learning how people relate to the land.

Chinese-speaking Jeffery Riegel, of the University of California at Berkeley, specializes in the Han Dynasty, the first Chinese to civilize and cultivate the desert stretches of the ancient Silk Road; he would be happy just to prowl every ruin we will pass along that great connecting link and traffic artery between East and West.

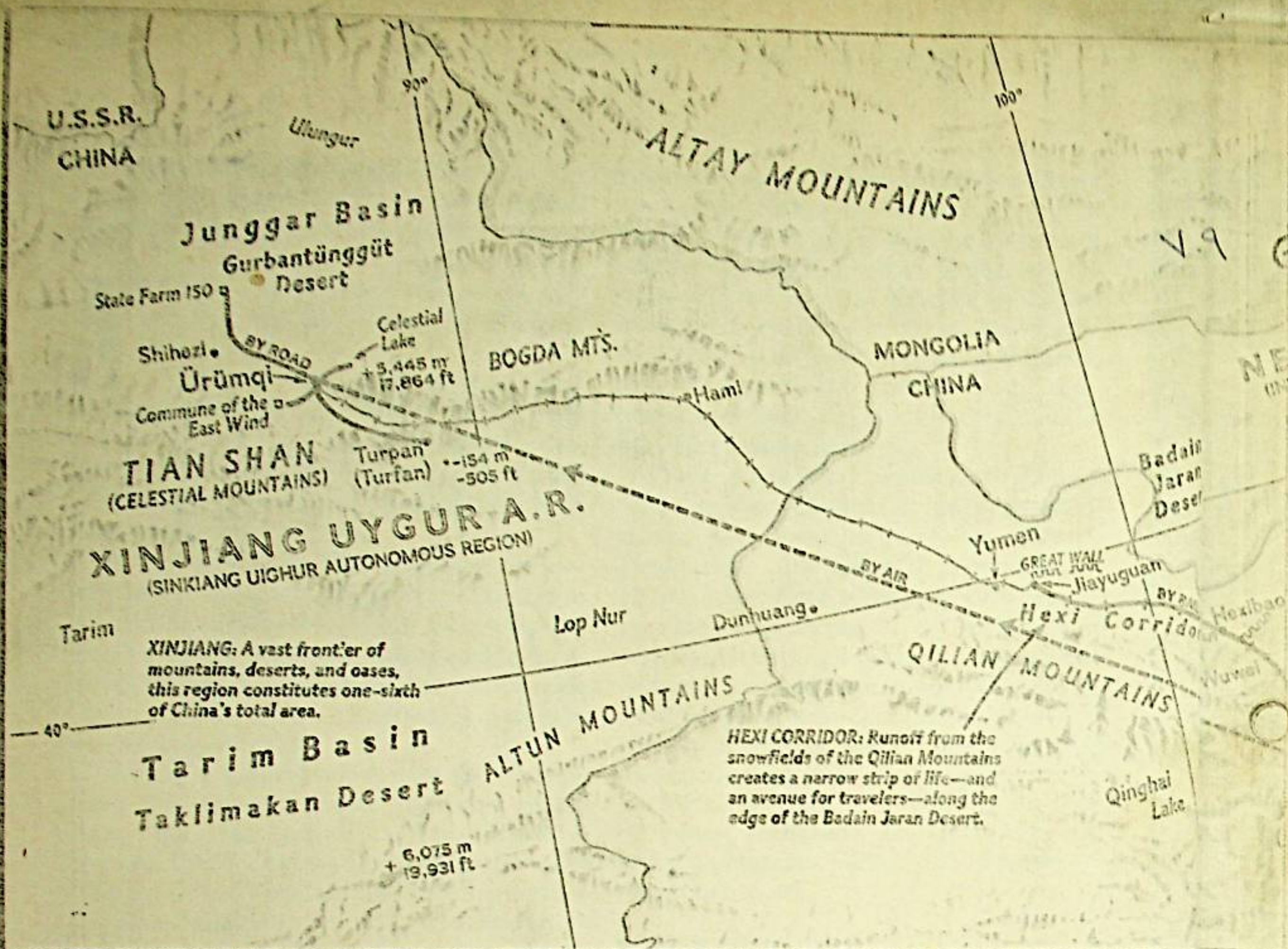
As journalists, photographer Bruce Dale and I want to do all of the above and more—and know there is not nearly enough time.

Only Larry Ma, a Chinese-American geographer from the University of Akron and

NOTE: The GEOGRAPHIC has begun using the Pinyin system of transcribing Chinese, a system officially adopted by China and much of the Western press. For well-known place-names and historical figures, the more familiar spellings may also appear.



West from Beijing (Peking), the visiting Americans crossed and recrossed the Great Wall on the old borderlands of traditional China. Beyond, the Xinjiang (Sinkiang) frontier still reflects its ancient role as a meeting place of Chinese civilization and central Asia's nomadic peoples. Here members of a dozen ethnic groups outnumber the nationally predominant Han Chinese.



IT IS SHORTLY before midnight on our last night in Beijing (Peking) before setting out by train across north China. The heat and humidity of Beijing's stifling summer have driven us out of our rooms at the Stalinesque-style Friendship Hotel up to the rooftop garden bar, a newly opened concession for the foreigners now pouring into China's capital.

A few French couples dance lethargically beneath colored paper lanterns. A group of more boisterous Africans sit nearby among many empty tables. If, like us, they are pursuing a cold beer, they will be surprised. The Chinese make good beer, but they seldom serve it cold. Warm beverages, they believe, are healthier.

We are members of a desert-study delegation that the National Geographic Society has sent at the invitation of the Chinese Academy of Sciences and its Institutes of Geography and Desert Research.* China, like much of the world, has been struggling with encroaching deserts in recent years. Vast stretches of north China are covered by

sand or graveled wastelands called gobi. Most of this territory has been closed to Westerners since Mao Zedong (Mao Tse-tung) established the new China in 1949. Now Chinese desert scientists want to meet with American arid-land specialists.

We are feeling frustrated tonight. We have been scheduled for too many academic meetings, and are worried we will not get enough time in the field.

Burly Thad Box, whose grandfather was the fastest catfish skinner in Llano County, Texas, and who is dean of Utah State's College of Natural Resources, would like to devote days to botanizing—sampling the wild plants of northern China.

Smithsonian Institution desert geologist Dr. Farouk El-Baz, a native of Egypt, wants to see the wondrous dune fields of the Taklimakan Desert, which centuries ago Marco Polo said were inhabited by ghosts.

Big Jack Johnson from the University of Arizona is, I suspect, fantasizing about

*The author reported on desertification around the world in the November 1979 GEOGRAPHIC.

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our group's official translator, is at ease. He knows that our route will be remarkable and that whatever we see will be a discovery.

ALREADY, in between receptions and lectures, we have begun to discover Beijing.

"Long live the great, glorious, and absolutely correct Communist Party" reads a red billboard on Chang'an Avenue, Beijing's broad main street. The sign seems out of date. The often shrill political rigidity of Mao's China has ebbed.

Along Democracy Wall people stand several layers deep to read posters that accuse certain government officials of corruption and harangue others for not releasing dissidents. Ragged people from the countryside draw crowds as they vehemently proclaim personal grievances.

We are watching freedom of speech blossom this summer. Soon dissenters would stage marches and even sit-ins. Unfortunately, this dissent would begin to move too fast for China's leaders. In the fall one of the detained dissidents would be tried and given a harsh sentence, and in December Democracy Wall would be shut down.

Nevertheless, the tide toward more personal freedom in China seems relentless. Jeff Riegel, who visited Beijing nine months earlier, remarks how relaxed the people now seem and how the drab Mao jackets are giving way to lighter and brighter clothes.

Love is also in bloom in Beijing. Public displays of affection have long been discouraged. Yet now hand holding is common, and in the parks couples display their affection even more earnestly.

At the theater a new play opens, surprisingly with a young couple dancing and singing about love. The couple's love affair and lives, however, are soon ruined by agents of the Gang of Four. This radical clique, led by Mao Zedong's wife, was held responsible for encouraging multitudes of teenage Red Guards to storm across China in the late 1960s, attacking almost every institution. During this Cultural Revolution, strict Maoist values were praised. Education, science, and industry were thrown into a dark age from which they are just emerging.

For instance, our group's guide, Dr. Zhao Sungqiao, one of the most distinguished

desert scientists in China, spent more than a year at heavy labor in a rural camp.

The widely despised Gang of Four, now under arrest and in disgrace, has become the scapegoat for most of China's problems, from the encroaching deserts to broken toilets. Even Mao Zedong is being decanonized. At the theater, whenever an actor brandishes Mao's famous little red book, it provokes instant laughter.

The popular late Premier Zhou Enlai is eclipsing Mao. Zhou protected many people during the worst days of the Cultural Revolution. On China's memorial day shortly after Zhou's death in 1976, people spontaneously began laying thousands of wreaths in Beijing's massive Tian An Men Square. Gang of Four supporters kept removing them, provoking the worst rioting the new China has known. When the furor subsided—and after Mao's death—Chairman Hua Guofeng and Vice Premier Deng Xiaoping, both moderates, emerged as leaders of a pragmatic China bent on modernizing at full speed.

WE DISCOVER more than a new political reality in China. Walking away from Tian An Men Square, we leave the somber Great Hall of the People behind. The streets narrow and buildings turn into 19th-century brick and stucco. Looking into the courtyard of one crumbling house, we see a sign proclaiming it to be the Grand Garden of the King.

Trolleys and bright buses are replaced by rattling horse-drawn carts, and we find ourselves on narrow streets with such names as Green Bamboo and Fetch the Oil Lamp. Even on winding back streets bicycles whiz by in amazing numbers.

It is dusk, and on this steamy evening the smells seem to change with each step we take. Robust aromas wafting from the noodle stands, Beijing's fast-food restaurants, converge with the scent of incense from an open window and then the stench of rotting melons and garbage that people have placed in orderly piles on the sidewalk to be picked up overnight.

It is our last night in Beijing, and we encourage each other. So what if the Chinese won't take us out to camp among the great dunes of the Taklimakan. So we will lecture

National Geographic, March 1980



Catching the fancy of a young passerby, toys displayed in a Beijing department store signal new government attitudes toward material goods. In a turn from rigid ideological goals, moderate policies—including incentives for individual initiative—aim to catapult China into the ranks of developed nations by the year 2000.

a lot. So the beer is warm. Maybe we will learn a few things about China anyway.

The next morning as Train Number 43 carries us out toward the Great Wall and climbs the craggy green mountains so beloved by Chinese painters, I notice many fields of corn. I ask Dr. Zhao when this import from America was first brought to China. "Four hundred years ago," he says.

"Oh, then it's been here a long time."

"No."

Four hundred years—twice the age of the United States—is brief to the Chinese. Our nation's history spans less time than most major Chinese dynasties. How curious our

urgency and impatience must seem to them.

Around noon we enter the famous loesslands. Suddenly the earth turns yellow. Loess means a very fine wind-borne silt. China's loess deposits, which were probably blown in from deserts to the north and west, are the world's greatest. Much of north-central China has been blanketed with loess layers as deep as 300 feet. With rains loess can be very fertile. In drought, however, the livelihoods of millions can blow away with clouds of yellow dust.

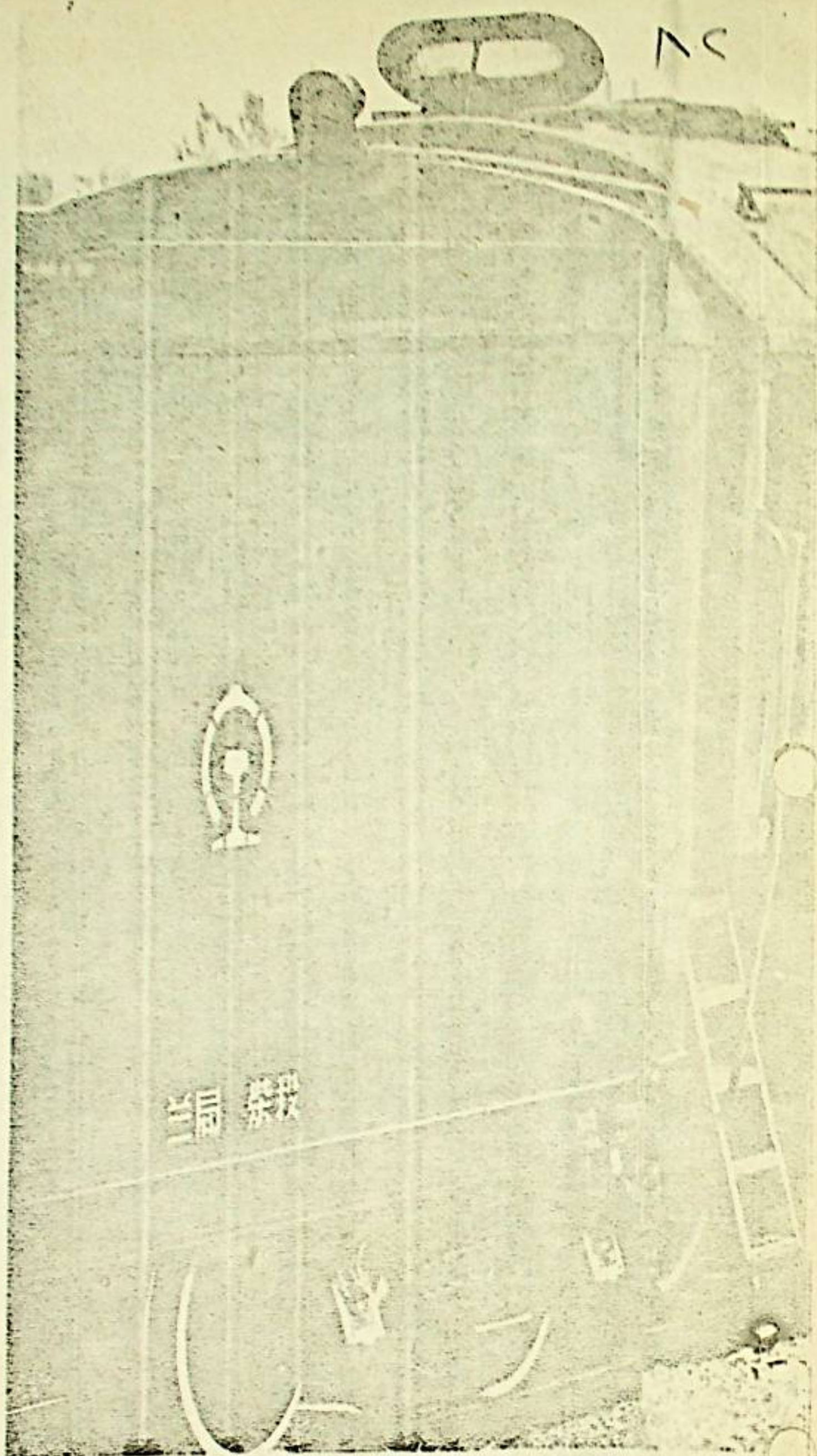
The fine loess particles, when compacted, bond together almost like cement. And so we see the housing change from the rock and



Shouldering the main load of commerce, railroads bind China's far-flung regions. Coal, the nation's most abundant fuel, powers steam-driven engines (above right).

Completion of a rail link to northwest China in the early 1960s overcame vast desert distances. Remembering the month-long pre-train journey east from Xinjiang, one man told the author, "You do not know how difficult it used to be to travel in China."

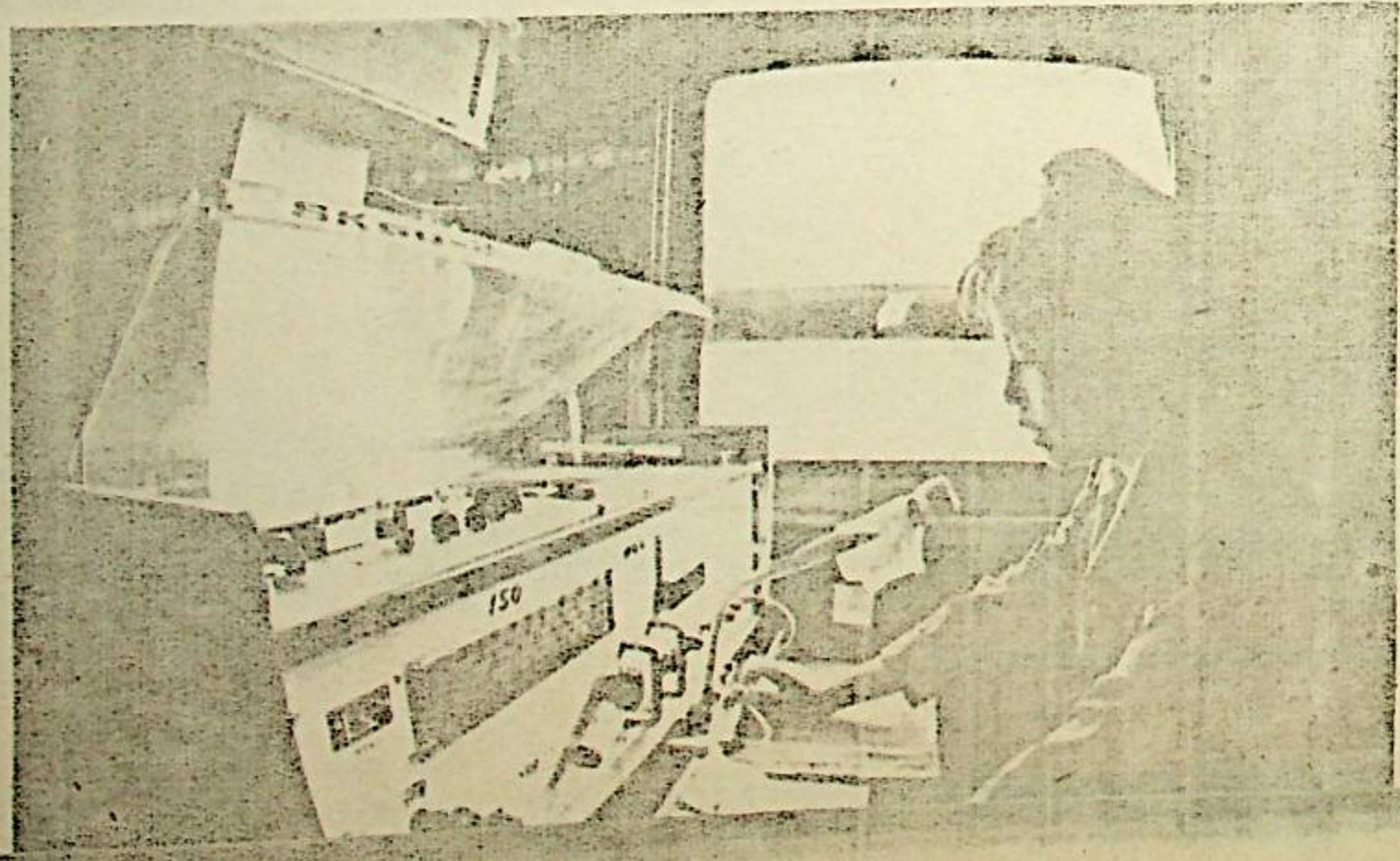
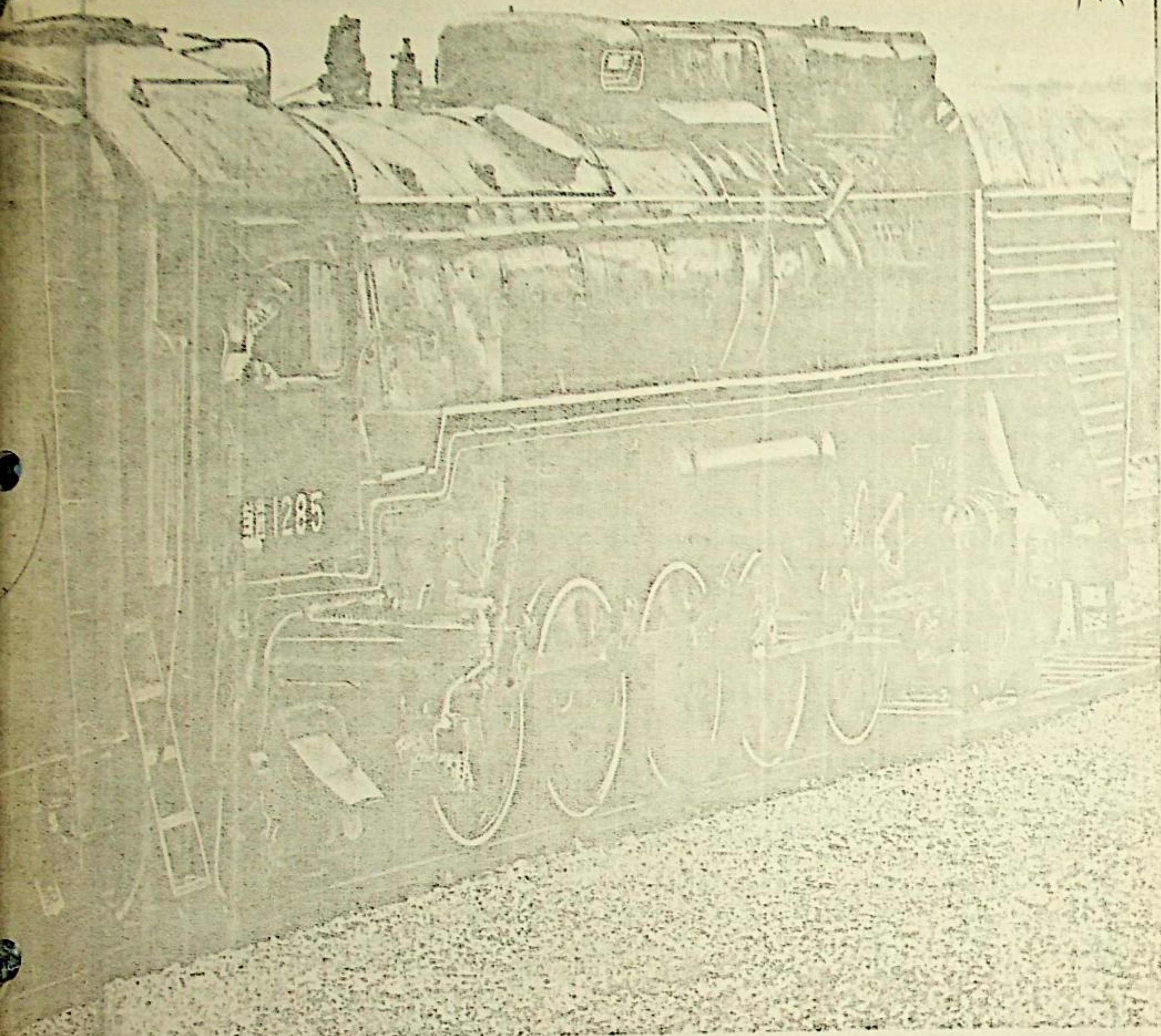
Most travelers today have a choice between "hard seat" and "hard bed"



cars—wooden seats (above left) or bunks. Foreigners and high-level Chinese may ride in more comfortable "soft" accommodations. Few citizens have enough money for travel. "At night," the author noted, "we saw people climbing on and off coal cars."

Working in a booth aboard the train, 30-year-old Fu Gueimin (right) broadcasts over a public-address system during most of the day. The program includes political news, history, and Chinese and Western music—including tunes from *The Sound of Music*.

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brick near Beijing to the "rammed earth" architecture typical of north and west China. Since Neolithic times people have simply built wooden frames, filled them with layers of loess, and pounded the dirt. When the frame is removed, a durable wall remains.

Also, caves can be cut easily into loess, and the hillsides across China are pocked with entrances to dwellings that have been dug even in recent times.

As Train Number 43 grinds on, we stop at countless coal towns and farming depots. On hilltops we see watchtowers built by forgotten emperors to spot marauding horsemen from the north.

All along the tracks we see the faces of the good earth and watch its lean bodies work the fields, child next to grandparent. These people have evolved with this land, terraced and shaped it, suffered with its floods and parchings, prospered with its bounty. The land is beautiful and lush in this harvest season, but without these humans, cutting, thrashing, and stacking hay, driving their donkey carts toward their villages, it would seem barren. How many billions of people have farmed this yellow soil in the same manner? Beijing fades in our minds as the

real China, the greatest agrarian country in the world, unfolds (map, pages 298-9).

Late in the day we pass once more through the winding Great Wall into the undulating grasslands of Inner Mongolia. The faces we see now are Mongol. Horses become the dominant animals.

The Great Wall was originally built to keep the Mongols' nomadic predecessors out of imperial China. But the invasions also went the other way, particularly in the past 300 years. When periods of good rains have made these semiarid steppes attractive to Chinese farmers, Chinese governments have opened up what was regarded as the "Mongolian wasteland" to settled agriculture. Already overgrazed for centuries, much more land was deforested and in drought years turned into sandy barrens.

Before "liberation" in Inner Mongolia it was said that if you wanted to hang yourself, you would have to walk a hundred miles to find a tree. No longer. Since 1949 the masses have planted enormous numbers of trees all over China, and much desert land has been salvaged. Still, serious problems continue, and as night falls and we head for the great northern loop of the Yellow River, we begin

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National Geographic, March 1980

Journey t

to see the dunes brought on by man's abuse.

"We have so many people to feed," Dr. Zhao tells us. "That is a great difficulty. We are overusing our land. Our population growth rate is down to 1.2 percent, but still we have 19 million babies every year."

As dawn breaks, we are in desert at last, paralleling the Yellow River as it curves through what most of the world thinks of as the Gobi desert.

Actually gobi is a Mongolian word. It means gravel and rock debris and denotes all the deserts and semideserts of the vast Inner Mongolian plateau, which stretches across north China.

The Chinese break the so-called Gobi into lesser deserts—the Ulan Buh, Tengger, Badain Jaran. All have active sand dunes in addition to their predominant gravel. In the far western Xinjiang (Sinkiang) region the Gobi merges with China's other great desert, the Taklimakan, a 900-mile-long sea of huge sand dunes that for centuries tormented travelers along the Silk Road. Taklimakan in the folklore of Xinjiang's Uygur (Uighur) people means, "Once you get in, you can never get out."

Like the Nile, the Yellow River enables

man to farm the desert along its banks. But in places we see large shifting dunes pushing into the river, and sometimes actually forcing it to change course.

TRAIN NUMBER 43 is beginning to feel like home. Three of us leave our wood-paneled compartments and head through the "hard seat" cars. We find a broadcast studio, in which a young woman plays Chinese music, interspersed occasionally with Rodgers and Hammerstein. She also reads history and heavy doses of political news (page 303). In our compartments we can turn the speakers off. Hard-seat passengers cannot. No one seems to mind—or even notice—the broadcasts.

A porter pushes a meal cart and serves ample helpings of a rice-and-egg dish. The cars are clean. They are full, but I've felt more squashed riding Amtrak. All through the train we get stares, followed by smiles.

Dining-car cashier Su Yuguo tries to explain how his abacus, or suan pan, works. He is a whiz, and knows it. When photographer Bruce Dale shows him a Japanese calculator, he writes out "445 x 65" in Arabic numerals. The (Continued on page 310)



Traditions of the soil, little changed since earliest times, can still be seen in this nation of a billion people—a quarter of the earth's inhabitants. A farmer's ox-drawn plow (left) could have been copied from one shown on a

painted brick (above) found in a 1,500-year-old tomb not far from his field. While the government points with pride to increasing mechanization in agriculture, human and animal power still produce most of China's food.

Crossing over into the future, China emphasizes Four Modernizations: agriculture, industry, national defense, and science and technology. Here in industrial Lanzhou on the Yellow River, horsepower moves on both hooves and wheels.

challenge is on. Bruce's calculator wins in a flash. Several contests later, Su figures out how to turn the tables: "56,785 x 26,354" he writes. The calculator can't handle that many numbers. Leisurely, Su triumphs.

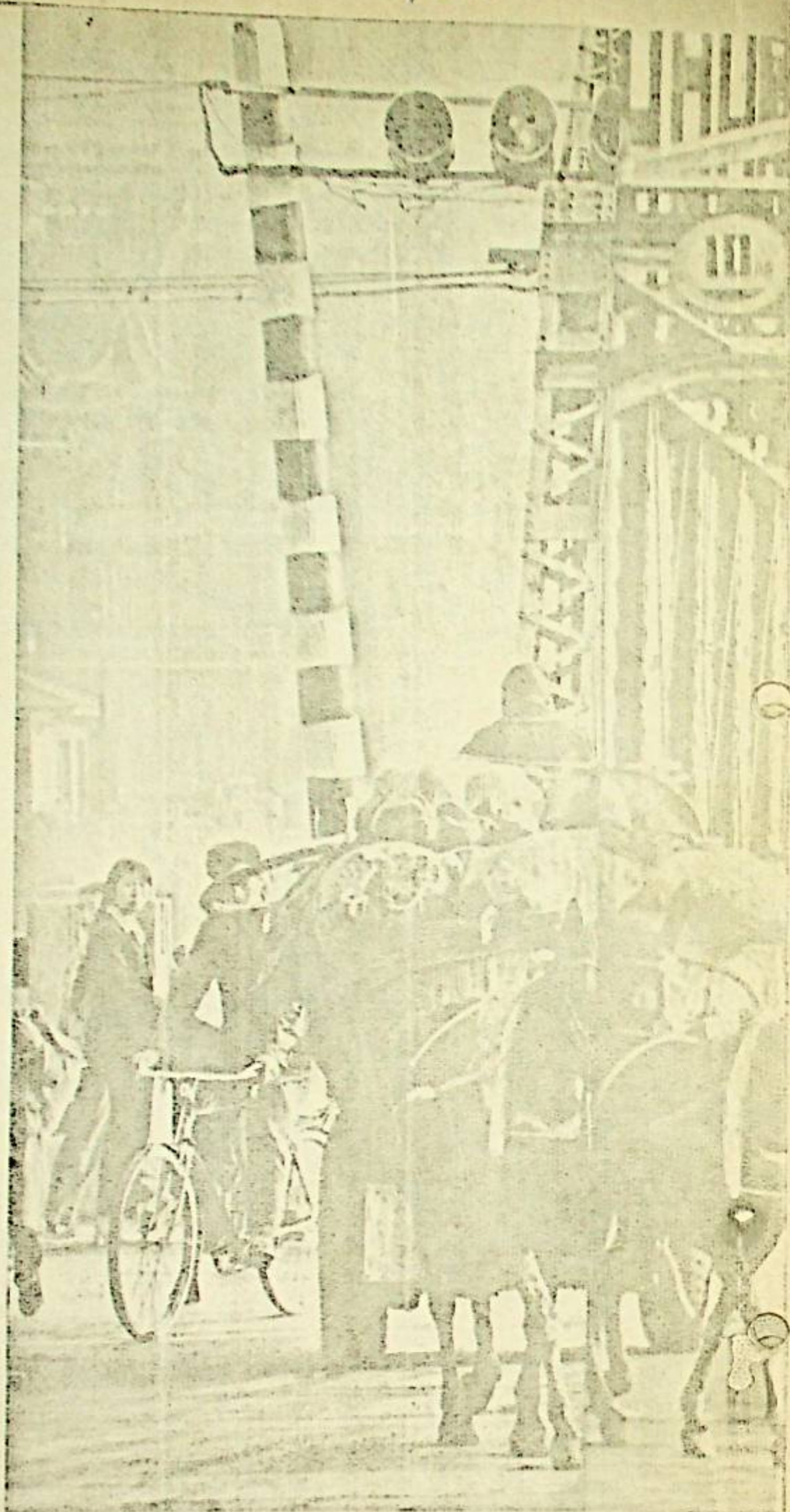
One of the delights of train travel through China is the food. Chef Shi Kunlan tells us he had to study cooking for three years at a special school run by the railroad.

"First they teach you to wash vegetables," Shi says. "After that you study ingredients, then general health and how to keep a kitchen clean. Then you learn how to chop. We work hard to learn how to control stove temperatures just right. Different ingredients must be cooked at different heats in the wok. Some foods you have to cook a second time—very hot—to get them crispy on the outside but still soft within."

WE GET OFF the train in the town of Zhongwei in the largely Muslim Ningxia autonomous region. It is a stronghold of the Hui people, one of the many minorities, which total some 60 million people in China. About 30,000 people live in Zhongwei, and even though it is raining, it seems that they are all out clapping and cheering our motorcade. We are the first Americans to visit in at least thirty years. When we walk through the town, thousands pour out of their houses and throng in the streets, pushing and shoving to get a glimpse of us (pages 306-307).

Next morning we drive to Shapotou on the edge of the Tengger Desert. Behind us churns the Yellow River, looking viscous with its load of ochre silt. Ahead lies one of the world's leading sand-control successes.

Over a period of two years Chinese manpower literally moved mountains of sand for twenty miles of railroad track to be laid. Then laborers, sometimes numbering in the thousands and often working in the below-freezing winter gales that scour the region,



laid a checkerboard pattern of hay thatch, which looks like a fishnet thrown across miles of dunes along the railbed (preceding pages). The thatch breaks the wind and has let the Chinese stabilize the dunes further with drought-tolerant plants. The rails still have to be swept after a big dust storm, but the dunes have never swallowed any part of these critical tracks across north China.

Meanwhile, Thad Box has a chance to ask

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a local scientist about the plant *Cannabis sativa*—which can be considered as either hemp or marijuana—that he has seen growing profusely all along our route. One patch, Thad noted, “would be enough to make all Beijing happy.” At first the scientist denies that people smoke it, but we have sometimes smelled it on the train. “It may be a big problem in south China, but not here,” he says. “Oh, come on. You teach at a college,” says

Thad. The scientist smiles. “Well, the official policy is that it is not smoked.”

We reboard the train and head for Lanzhou, an ancient Silk Road stop that since 1949 has been turned into a heavy industrial city of 2,000,000.

Lanzhou’s petrochemical factories pour out a thick veil of lung-threatening fumes. Most of our group quickly develop sore throats, headaches, sinus problems, and

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a compulsion to get back to the desert. Lanzhou is the home of the Institute of Desert Research, one of our hosts. We are to spend five days there in academic exchanges. But when we arrive, we get the bad news that heavy rains have cut rail lines and sent flash floods down on a pivotal point on our itinerary—the oasis of Dunhuang.

Dunhuang was a watering hole on the fringe of the Taklimakan, where travelers either prepared for or recuperated from their horrible crossing. Nearby lies one of the least known wonders of the world, the Caves of the Thousand Buddhas. For centuries pilgrims from all over central Asia endured great hardship to visit this labyrinth of sculptures and frescoes, painted by Buddhist monks mostly during the Tang Dynasty (A.D. 618-906).

The flood-disrupted rail line goes as far as Jiayuguan, westernmost fortress on the Great Wall. For logistic reasons, it is decided we will depart almost at once on the thirty-hour train trip to Jiayuguan, spend the day, and return to Lanzhou for our lectures. Then we will fly to Ürümqi to begin our travels in Xinjiang.

As we ride the Hexi Corridor, along the route of the ancient Silk Road, we can look out one window and see the wild, snow-capped Qilian Mountains, with 17,000-foot peaks. Out the other, as we near Jiayuguan, we see our first stretches of gobi. There is little to be said for it. Colorless flat gravel lacks the romance of dunes, or even the grotesqueness of badlands. It is monotony. For that reason it deserves the dread and fear it has provoked across the ages.

It was into this land some 2,000 years ago that Han emperors sent soldier-farmers to secure their frontiers. By building irrigation systems to tap mountain snows, the Han watered the desert and established self-sufficient towns. They brought with them their precious silkworms, set up mulberry plantations, and prospered.

Bundled against winter rains, hay shocks take shape at harvest's end. Farming occupies four out of five Chinese, yet only 11 percent of China is arable—a situation demanding intensive labor and high yields.

The mulberry trees near Jiayuguan died of neglect about 1200, after the silk route shifted north. Prosperity vanished, and for the ensuing centuries life along the western Hexi Corridor has been harsh. The local people say their land has three "too manys" and three "too littles": "Too many winds and too little rain; too much sand and too little grass; too many stones and too little soil."

FINALLY we reach the fortress Jiayuguan, with its colorful drum towers rising above rammed-earth walls. Jiayuguan's grace and dignity are startling in this barren land of meager architecture. The rubble that was the Great Wall runs up to Jiayuguan's eastern flank (preceding pages). To the west lies central Asia.

For centuries, China—and therefore the civilized world—ended at Jiayuguan. "We had a saying," Dr. Zhao tells me. "When you leave Jiayuguan, you leave the land of men and enter the land of ghosts. When you leave this gate, your eyes will never be dry."

When I walk through Jiayuguan's exit, a long black corridor known as the Gate of the Bravest People in the World, I can understand a traveler's tears. Before partial restoration, it used to be carved with anguished graffiti, very often of disgraced officials or criminals being banished into the wilderness. Outside the gate endless plains of dark gobi shimmer in the heat. It would not take long, wandering in that desolation, for the ghosts to descend.

I turn back and see civilized China again. Smoke billows from a giant steel complex in modern Jiayuguan. In order to develop iron deposits found nearby, China's planners have turned this long-dormant village into a town of 100,000 people.

A doctor and his wife tell me they were sent to Jiayuguan from Beijing in 1966. "It was hard to get used to being out here, but we have little choice," they say. "Doctors are needed here. Of course, we would like to go elsewhere. We have petitioned the government to let us move. We have distinguished

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contacts trying to arrange a transfer, but it's an open question whether we shall ever be able to leave. Some people like it here. It doesn't rain much."

We return to Lanzhou and are heartened by the reception the scientists at the Institute of Desert Research give us. Their facilities are not the most modern, but they are deservedly proud that they are rebounding so energetically from the persecutions of the Cultural Revolution. The members of our group are bombarded with questions about research methods, remote-sensing satellites, and American equipment. Many contacts for future communications are made.

Since we are not desert specialists, Bruce and I are let loose to wander Lanzhou.

Yang Yanlin, our 24-year-old translator, tells us he is lucky. He has his own room at the institute. At factories most people live three or four to a room. Although older factory workers can earn as much as \$65 a month, Yang takes home about \$35. He spends \$12 of that amount for food, \$6 for cigarettes and clothes. He gives some to his parents and saves the rest. Maybe in five years, he figures, he will have a hundred dollars to buy a bicycle.

We climb a hill into White Pagoda Park. In the thick, sultry air we hear music and head toward a pavilion overlooking the Yellow River. Young couples are dancing to very old records and an accordion. They invite us to join them.

My Chinese is just good enough to learn that this is their day off, and even though dancing is officially frowned upon, they intend to go on all day. Our feet are studied, and after Bruce twirls his partner, everyone is twirling. We have tea and smile a lot at each other.

About a year ago, a young man tells us, there was a feeling among the people that their lives were "just too rough." Little recreation, few movies or plays. When the government gave signs it was loosening up in late 1978 and began making contact with the rest of the world, freedoms such as dancing

Chinese by nationality, the Uygur people of the Xinjiang region hold fast to Islam and their Turkic language. Yet the Han Chinese influence grows: This basketball player's shirt bears his team's name, Vanguard, in both Chinese characters and the official Pinyin transcription system.

became infectious. "It seemed to get completely out of hand," he says. "People were dancing when they should have been working. The government cracked down for a while. But they are listening to the masses now. The quality of life is higher."

That evening in central Lanzhou, we find the streets thronged with excited people. Countless children in festive school uniforms carry flowers and bang drums and cymbals. We see flares in the distance. Soon about a hundred young people in blue sweat suits jog by, carrying torches.

They are Lanzhou's team in a national relay being run along the route of the Communist army's 1934-35 Long March from near Shanghai to the mountain stronghold of Yan'an. The relay will continue from town to town and then head for Beijing, to arrive in time to celebrate the thirtieth anniversary of the founding of the People's Republic of China (pages 295-7).

At Lanzhou's East Is Red Square, we wait for the runners to return from a circuit of the city. Once more people gather around us. Party officials on the dais point at the disturbance we are creating. Soon one approaches us. "These are two American news reporters who think this is an important event," explains Yang. "Tell them to move on," says the official. "There are too many people here. A few of our young people are not good. They might try to take money from foreign friends."

Until now theft had hardly been a worry. The Chinese press has recognized increasing hoodlumism and crime in the cities, but foreigners supposedly have little to fear; the punishment for crimes against them has been extremely harsh. To a traveler, honesty seems ingrained in the new China. We felt perfectly secure in leaving money and passports lying in our rooms.

Since the most obvious thing about Lanzhou is its bad air, we went to its biggest polluter, the Lanzhou Chemical Industry

Company. Zhang Liacheng, the general manager, knows the problem is serious. "We need to learn from industrial countries better ways to control pollution."

Before leaving Lanzhou for Xinjiang, we visit a barbershop for a touch of luxury—a shave and a hair wash. Bruce also wants to photograph a Chinese haircut. Jeff Riegel, with his long, full head of hair, is voted most photogenic and is impressed off to the barbershop, muttering about what his stylist in Berkeley will say.

The gray-blue barbershop is a busy place, with wooden ceiling fans and about twenty

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In an oasis of shade, Uygur children tend their brother beneath a grape arbor in the Turpan Depression. One of the lowest spots on land, it plunges to 595 feet below sea level, and in summer is a caldron of blast-furnace heat.

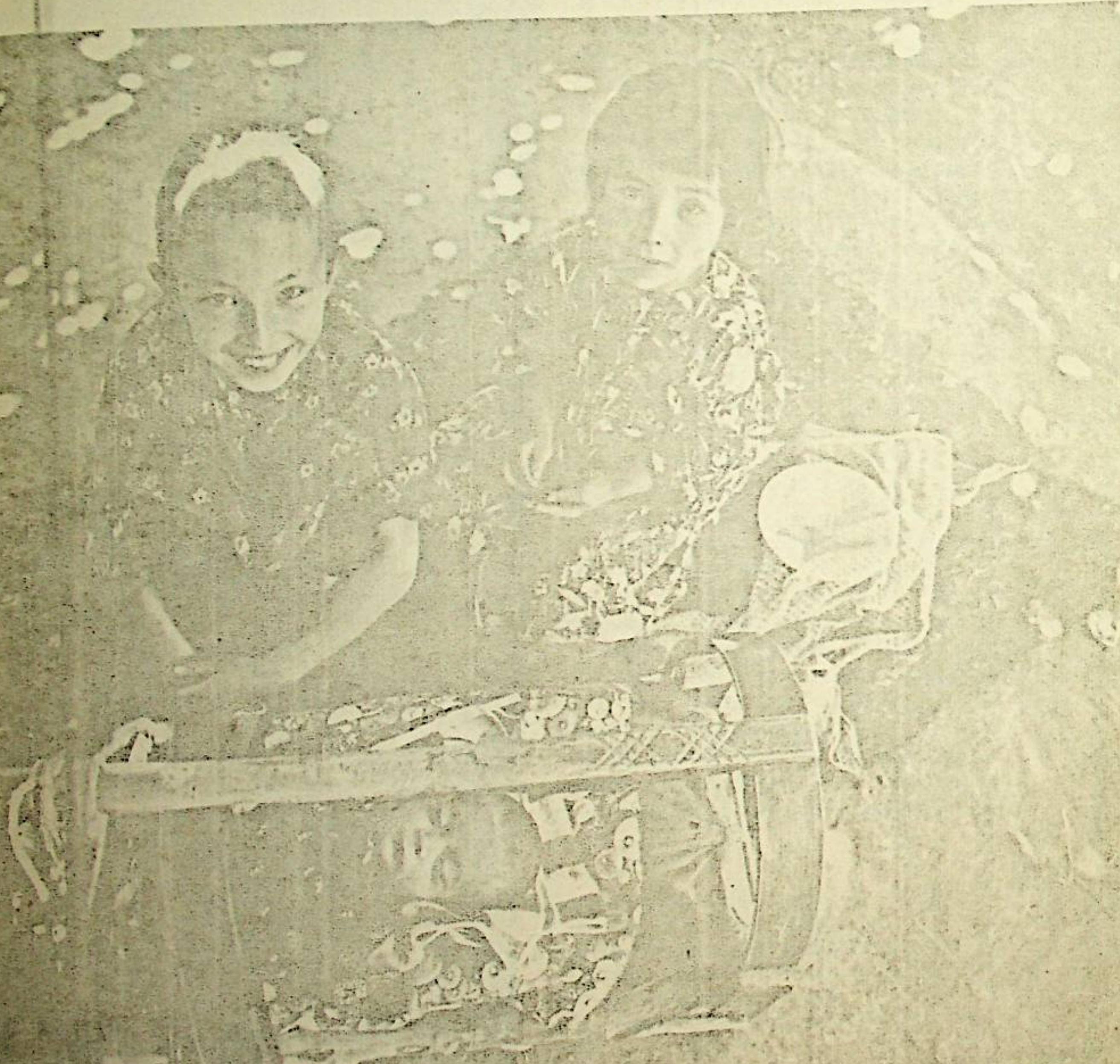
chairs. People are packed onto wooden benches, waiting to be called. Women go upstairs, men stay down. The barbers do not seem to know what to do with Western hairstyles. Jeff told his to take only the smallest amount off, but I can see in my mirror what Jeff cannot yet see. The back of his head will take some time to recover.

Meanwhile, I undergo a Chinese shave. The barber puts on a surgical mask. I presume he doesn't want to spread germs. Every inch of my face—hairline, eyelids, nose, even my earlobes—is scraped clean with what feels like a thousand-year-old razor

blade. After a shampoo my hair is singed dry with a blower and waved in the style worn by Zhou Enlai. I take that as a compliment.

We board a propjet for our four-hour flight to Ürümqi. The seats are built for Chinese, of course, and Jack Johnson and Thad Box, who are constructed like football players, have trouble. "He can't sit! He can't sit!" says one excited Chinese watching Jack. "That's the problem with these foreigners. They are just too big!"

Xinjiang, which is larger than Alaska, occupies one-sixth of China. Its name means "new frontier" in Mandarin, the chief



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language of China's dominant Han people. Ninety-four percent of all Chinese are Han. Still, with a population of about a billion, China has enough ethnic peoples to equal the populations of New York, Illinois, Ohio, and California. In Xinjiang, China's back door to the Soviet Union, the Han are outnumbered. In this region of 11 million live a dozen ethnic groups. Most, like the 5.5 million Uygur (wee-gor) and the 800,000 Kazaks, are Muslim and of Turkic origin.

THROUGHOUT HISTORY the Han Chinese have regarded the people of Xinjiang as barbarians. Even though the Han constituted only 5 percent of Xinjiang's population before liberation, they ruled the province either through force or manipulation of its ethnic groups. But in the 1950s the Han began to change their ratio in Xinjiang. They sent colonists en masse into the region, both to ease population pressures in the east and to stabilize and fortify their sensitive borders with the Soviet Union. Also, many former Red Guards were rusticated to Xinjiang after 1968 to defuse their energies. More than four million Han now live in Xinjiang.

Predictably, this influx aroused resentment and has sparked occasional violence among the minorities. So did the Cultural Revolution's eager push to wipe out old customs and cultures. Today the Chinese Government is making serious efforts to placate and promote its minorities. Ethnic languages are being fostered. Minority children are often given special educational privileges. Young minority couples are allowed to marry earlier than the ages sanctioned for the Han Chinese—usually 23 for women and 26 for men. They are also exempt from birth-control pressures that encourage Han couples to have only one child.

Arzgal, director of the Ürümqi Carpet Factory, exemplifies China's minorities policy, similar to affirmative action in the

Carved niches in the cliffs of Jiaohe, a ruined city in the Turpan Depression, may have held Buddhist shrines. The city flourished as a Silk Road outpost from about A. D. 200 until sudden abandonment before the year 1000.

United States. She is a "diligent worker," we are told. She is young, female, and, in a factory that is 80 percent Han, she is Uygur. Therefore, the party selected her to be the 300-worker factory's titular head.

"Most of our patterns come from Hotan [Khotan] in the Taklimakan Desert," says Arzigal. "There the people begin learning their skill when they are 7 years old."

However, the Han workers in Arzigal's factory learn to weave in only three months.

Yang Zhongfen, who has been working here for four years, says it takes her about a month on her large handloom to weave one square meter of carpet.

Does she like what she does? "I wanted to be in the PLA [People's Liberation Army], but the government told me to be a worker."

So I said I would love to be a worker." Then, she adds with a grin, "Once you have your job, you love your job."

LIKE LANZHOU, Ürümqi has become an industrial city, growing from 80,000 in the 1940s to about a million. Nondescript new buildings and factories have obscured whatever charm or architectural interest the city may have had.

Not so with the Turpan (Turfan) oasis, which lies five hours away by road in one of the world's deepest and hottest depressions.

To reach Turpan, we cross through oblivion. As we descend through dark, naked scarps, the wind picks up. The heat in our minibus climbs to 100 degrees F. Choking dust envelops us. There is no longer any



horizon. Gray gobi merges into gravel skies. A donkey cart appears out of the dust, its driver asleep on his back.

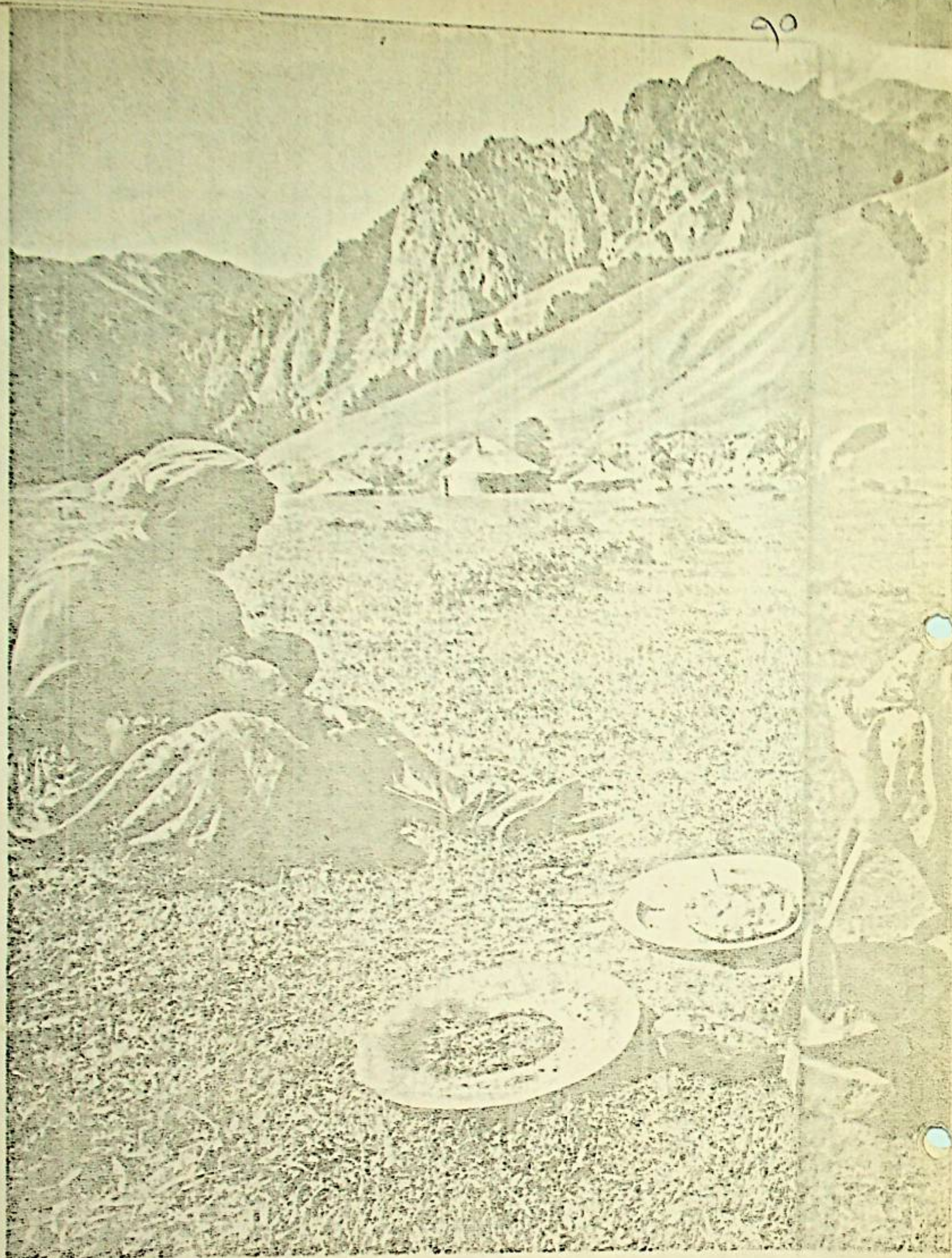
Eventually we see row after row of big pockmarks in the desert. These are the holes through which men of Turpan descend to clean their karez, or underground canals, dug to bring in irrigation water from the nearby Tian Shan (Celestial Mountains). About 950 karez converge on Turpan. Some of these canals go back to Han Dynasty days, when the concept first arrived in Turpan via the Silk Road from Persia. There they are called qanats. Qanats or karez, it is these underground lifelines that make possible the colorful, almost biblical Turpan culture that now explodes out of the black-and-white gobi world.

ARE WE STILL in China? These faces I would expect to see in Samarkand. These clothes in Kabul. I could swear I have seen that old man with his long beard, holding his staff and riding a donkey on the road to Jerusalem. The dancing troupe, with its handsome acrobatic men and its gleeful, exuberantly dressed women twirling banners, might well be celebrating the harvest in Uzbekistan. Their comedian had to have come from Armenia.

Turpan seems so isolated. Yet for many centuries, when caravan commerce thrived, this melon- and grape-growing oasis was one of the cultural crossroads of the world. The ancient Han ruled Turpan. So did numerous central Asian peoples who migrated through and got lost in history.



Transplanted in the desert from China's crowded east, Han Chinese families (left) work at state farms on former wastelands and help swell the population along the sensitive border with the Soviet Union. Native Kazahs (above) share a nomadic ancestry with the closely akin Uygur and cling to a pastoral way of life.



In a green season, Kazak women tend camp in the Tian Shan (Celestial Mountains). Traditional felt yurts house them when they move their herds of sheep, goats, and horses to high pastures.

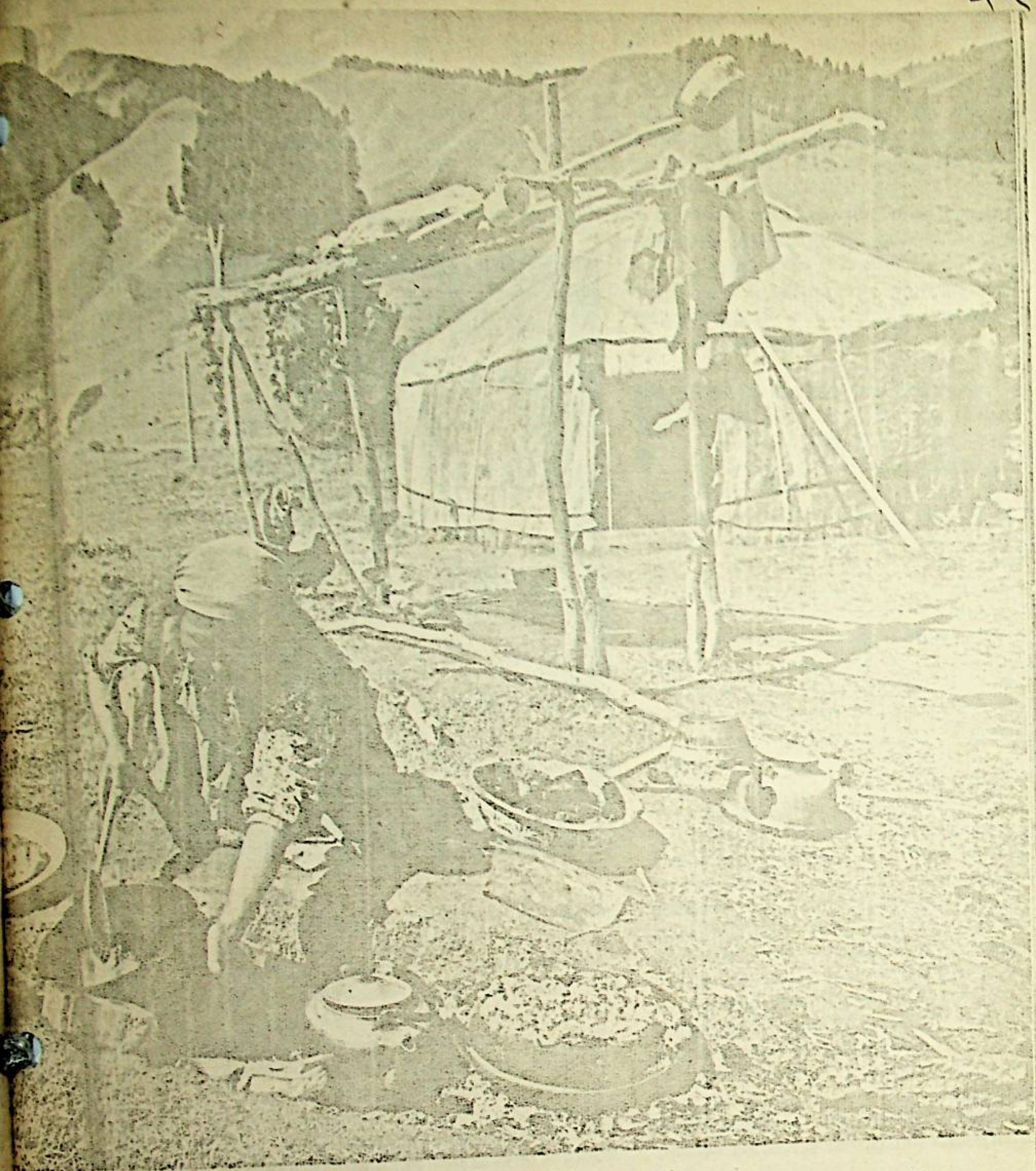
Amid the ruins of the fortress town of Gaochang we see a Buddhist temple dating from the fourth century, when the faith of India began spreading feverishly across China. Then, when Islam arrived, the temple was converted into a mosque.

Today's faith is Communism. But walking through Astana, one of Turpan's oldest villages, we seem far removed from dogma of any kind.

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Grape arbors shade most homes, keeping them comfortable in the 110°F heat. Everywhere people munch Turpan's sweet melons to slake their thirst. Bells clang on the carts taking women and children to market. An irrigation channel gurgles along the road as it carries its cool mountain water.

In front of one home a woman named Ruzihan, who says she is 101 years old, sits on a blanket spread with rice. Her family is

having guests for dinner, and she is plucking gravel from the grain. Next to her under the grape arbor is a bed, where she naps during the heat of the day.

Beneath the arbor of an elderly farmer we sit on bright Hotan carpets and admire the ripe grapes overhead. "Our weather is such that we can let them dangle all summer and eat them at will," he says.

His wife brings a plate of bread, cheese,

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Beaming approval, 53-year-old Allabedi welcomes the Communist order that has improved material life while still allowing his Kazak people a measure of their wandering freedom.



and handsomely curled fried wheat noodles called *sangza*. The bread is hard, so the farmer shows me that it should be dipped in tea. I ask his name. "Aziz," he replies. "Do Uygur people have only one name?" I ask. "We just use first names in everyday life. There is no need to do otherwise."

Aziz and his wife, Imsahan, invite us inside their home. Their bed is a hard earthen slab, about ten feet by twelve, covered with a rough hair blanket and several multicolored quilts. An elegant old tapestry covers the wall. Beside it hang a lutelike instrument called a *dutar* and a portrait of Chairman Hun. On a table sit an alarm clock and a portable radio. They have another room, which holds their sewing machine and serves as a parlor. When I ask how Communism has affected their lives, they simply say: "Before, we were poverty stricken. We were unable to get things."

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One thing Communism clearly has brought to Turpan is more trees. We are shown extensive forests, or shelterbelts, which since liberation have helped fend off the ferocious winds that blast Turpan between March and May. The combination of sixty-mile-an-hour gusts, subfreezing cold, and sand easily kills unprotected grapevines in spring. The shelterbelts, however, have helped Turpan's grape industry expand into what was bare dune and gobi.

PERHAPS no one has been enjoying Turpan as much as Farouk. Because he is among fellow Muslims, he has been wearing his flowing white Egyptian galabia. This robe has been a big hit with all the people we've met, and during our three-hour afternoon siesta we can hear him outside the rest house setting young Uygur girls giggling in admiration. But then Farouk deserves compensation. He brought along hundreds of soil-sample bags, and we have scarcely seen a dune.

Earlier, in Muslim Ningxia, Farouk also got special treatment when he wore his galabia. He was placed at a separate table with no pork and no beer.

Back in Ürümqi he stops to take a picture of a mosque and is warmly greeted by an imam who speaks perfect Arabic. The imam invites him back the next evening for what Farouk thinks is going to be a discussion of the state of Islam in Xinjiang. Instead, it is a three-hour, late-night prayer session, with prolonged, painful bowings and kneelings. Farouk, however, does see that the mosque is filled only with old men. Since the Cultural Revolution, the imam tells him, young people know little about religion.

In Ürümqi it is decided finally that a trip into the dune fields of the Taklimakan would be too difficult to arrange. Our comfort, we are told, is the primary concern. We proceed north instead on an all-day spine-jarring road trip to State Farm 150, a huge region reclaimed from the Gurbantünggüt, a second-rate desert as deserts go, and populated almost exclusively with Han Chinese.

State Farm 150 began as a military project, some 150 miles from the border with the Soviet Union. Its settlers were comparable to the soldier-farmers that the early Han emperors sent out to colonize their frontier.

National Geographic, March 1980

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It is a grid of barrack-style housing and fields, mainly of melons, cotton, and grain. It has about 17,000 settlers, who are divided into companies and then into production brigades.

There is a restrained atmosphere about State Farm 150. Only here have the children been shy of us. When I ask a group of men if ten years ago they thought they'd ever see an American here, they laugh and shake their heads. When I interview young women in a melon field, a foreman monitors. Wang Xinhua, 19, says she was sent here two years ago from the closest city, Shihezi, "to learn from the peasants." China's policy is to rusticate many of its young people, or send them away from the overcrowded cities where there are job shortages. However, as a birth-control incentive, the Chinese exempt from rustication children from families with only one child. Especially good students are sometimes exempt as well.

Wang does not expect to leave State Farm 150 anytime soon. "If the state asks me to go, I will of course. But I like it here."

Do they ever have dances? Wang giggles no. "We play basketball and Ping-Pong and engage in cultural activities. We have political meetings once a week." Are they fun? She looks at her foreman and decides not to answer directly. "We study documents of the party and read its newspapers."

Somehow we find ourselves alone with several original settlers of State Farm 150. "We were all volunteers back then," says Wei Guoan. "We were young and enthusiastic about defending and developing the border. It was an exciting time. Nobody was out here but the foxes and the yellow goats. The work was difficult. We had little machinery to help."

"We had no housing," adds He Yunqi. "We dug pits and covered them with twigs and mud. Five or six people lived in each. Most were single. Families came later."

Do the Russians ever try to cross over and steal your melons? Laughter. "They wouldn't dare."

Often the Chinese seem embarrassed by the backward state of their agriculture. Near Jiayuguan they did not want us to photograph a farmer plowing behind an ox, a common sight across China (page 304). On Farm 150 they are intensely proud of their

tractors, which they work day and night.

Returning to Ürümqi, we pass about thirty farm workers. "I think one tractor could do better than all those people," says scientist Liang Kuangyi. "But then what would all those people do?" I ask. Liang ponders a moment. "Quite right," he says.

IN THE MOUNTAINS and high pastures around Ürümqi we meet a third Xinjiang life-style, that of the pastoral Kazak people.

On the way our minibus breaks down once more. So far in Xinjiang we have had three flat tires, a broken distributor, a ruptured brake cylinder, a dead battery, two broken fan belts, and a sparking short circuit under the dashboard. Yet the Chinese driver-mechanics are a wonder. No problem throws them for long. They carry a ready supply of tools and parts. This time the water pump is broken. They pull it out and proceed to make from scrap metal the part they need to fix it. "In the U. S.," notes car buff Jack Johnson, "a mechanic would insist on putting in a whole new pump."

We resume our climb into the Tian Shan, and the air grows cool. We pass rapids with torrents of white water racing down steep canyons. Cottonwoods and spruce appear, as do yurts, the domed, tentlike homes of the Kazaks. Cowboys on horseback, wearing green Mao caps and bearing rifles to protect against predators, drive cattle to pasture. Wolves are a problem here; snow leopards are the second most worrisome species, we are told.

When we reach Celestial Lake, a reservoir of pristine snowmelt from the surrounding peaks, we meet a young mountaineering team from Beijing. They wear elaborate climbing gear, and one carries a \$2,000 German camera, the strongest indication we have seen yet that, along with its masses, China still has its favored citizens.

After a two-hour hike, Bob, Jeff, and I

While men are away in the high country, a Kazak mother stays with her children (overleaf) in a lower camp. Minorities may raise large families, but Han Chinese are penalized for having more than two children.

reach a small group of yurts. On the gate of a fence that pens in some sheep and goats a sign reads: "The person who doesn't close this door is a dog-bear." A herder, Kamel, greets us excitedly and takes us into his yurt.

"We have many other places we live," says Kamel in halting Chinese. "Before the snows come, we will move twenty kilometers down the mountain."

Kamel's husky wife brings bread and cups of scalded goat milk. "Ish!" she orders. We assume that means drink up. The brew is bitter and goes down best in tiny sips.

"We are considered to be part of a commune," Kamel continues. "I'm not really sure what that means. I think there are about a thousand people in it altogether."

He and six other men in his brigade manage a herd of 300 animals. He can keep ten for his own use. The others are sold and the profits shared by the commune.

Several days later, wandering the mountainbound Commune of the East Wind, we come across some yurts where women are cooking fry bread over a pit fire (pages 324-5). Their features look like those of American Indians. We could be in a Blackfoot

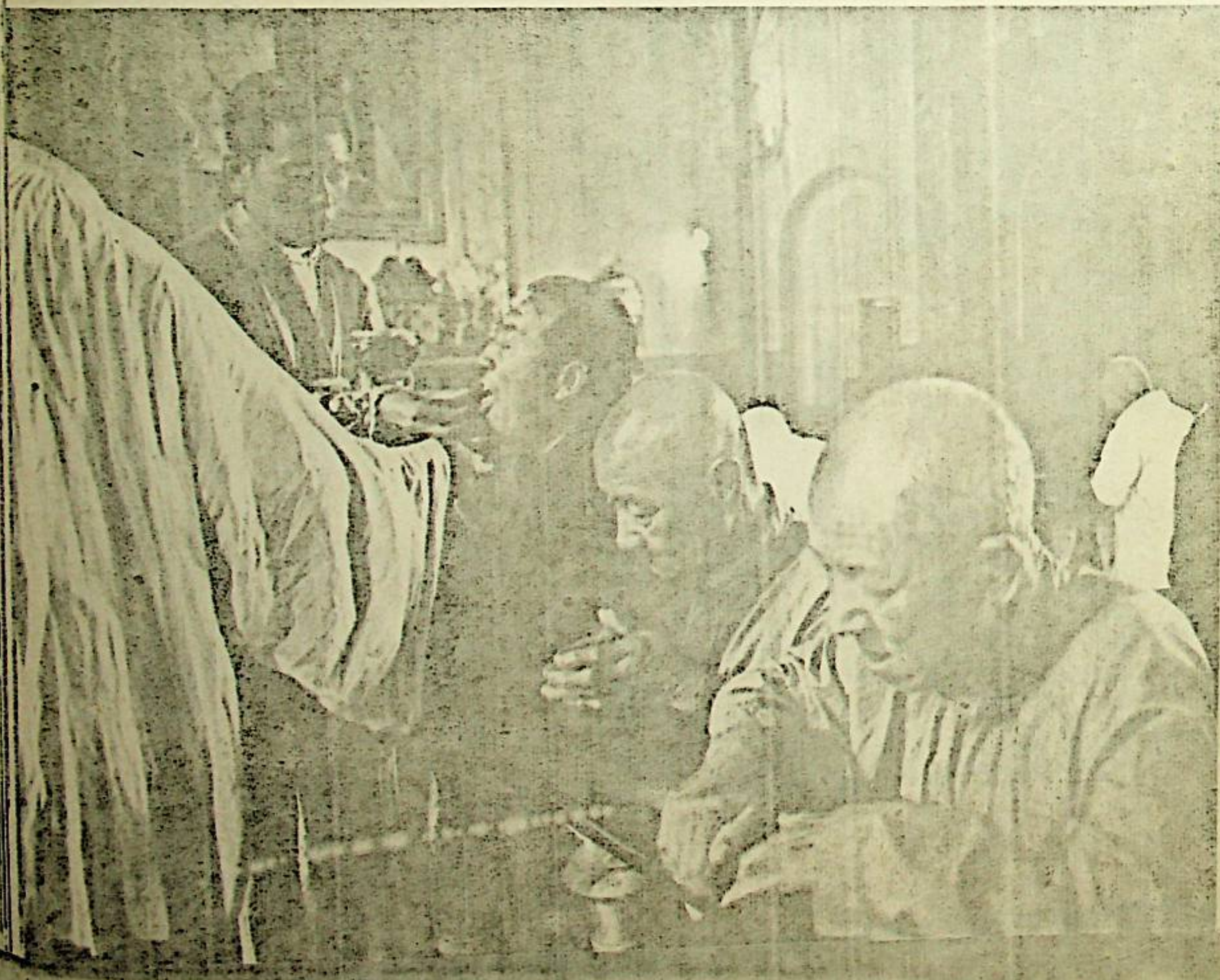
camp in Montana a hundred years ago.

The older children and men are days away in the mountains tending livestock. Bruce produces an aluminum-foil skillet of Jiffypop popcorn. The children's eyes pop along with the corn as the skillet top expands over the pit fire. No one will eat this strange food until I have a few handfuls. Then the children try it. Slowly the mothers—and finally even the chickens—join in with gusto.

A few miles away we come to some log-and-mud cabins and meet a Kazak named Allabedi walking down the road carrying a scythe (page 326). Allabedi is 53 years old. He says he is on his way to cut hay to earn extra work points. At the end of the year, when the 7,000-member commune figures out its profits, it will distribute them in money and animals on the basis of work points. People use the cash to buy such things as finer clothes, coal, and cigarettes.

"Collectives are very good," says Allabedi. "We have been able to keep our pastoral life, but now everyone, including children, can get money."

"Before liberation everything belonged to the rich. We worked hard for them without



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getting much back. We went hungry so often. We had not enough clothing. We used to live in caves. Now we have come outside into real houses.

"We are happy," he says, emphatically. "We work—but not too hard. When we are sick, there are doctors to treat us. I didn't go to school, but my daughter studies physics at Xinjiang University. Last year Chairman Hua was here. This is the best of times!"

THE BEST OF TIMES. No one else in China had put it quite that way, and many, especially the country's young dissidents, might strike a less euphoric note. Modernization poses huge problems, and the big, aging bureaucracy that must solve them suffers from too much incompetence and a lingering fear that the days of persecution might yet return.

But all across China we sensed optimism. We felt it in the exuberance of the scientists who have been given back their self-respect. It rode the trains and walked village streets, leaping out from eyes that were seeing Americans—symbols that change is coming to China—for the first time.

The fires of faith burned low but never died when religions were attacked during the Cultural Revolution. Attendance was still at Beijing's Catholic Nan Tang Cathedral (left). Red Guards, shock troops of the radical upheaval, once entered the sanctuary, but they left without damaging it.

In recent times worshipers have resurfaced. Father Laurence She Yukan, here garbed in a gold robe, weathered the storm to preside over a flock that again feels free enough to attend Mass, take Communion, and go to confession (right).

The twists and turns of China's course baffle even many Chinese, and the land's vast sweep defies an easy grasp. Yet one thing came clear to the Americans on their visit: China's newly revealed face is trying to smile.

It was certainly in the faces I saw at Mass at the 75-year-old Nan Tang Cathedral the Sunday after we returned to Beijing (lower left). The government had just announced that the city's 6,000 Catholics could now have a bishop.

"We have been saying Mass continually, but the people were too scared to come," says Father Laurence She Yukan.

The party still keeps a rein on the church, and that is probably why China's Catholics do not acknowledge the Pope as their head. The Mass, oddly enough, is in Latin.

Nan Tang Cathedral is crowded. Many churchgoers look younger than the revolution. I watch one intense youth, his eyes closed, his fingers clutching a rosary, and wonder how the faith ever stayed alive.

IT IS SHORTLY after dusk on our last night in China. The heat and humidity of Beijing's stifling summer are still oppressive. But I don't mind. Throughout China we have seen the human spirit reviving. Hot as it is, it feels like the first week of spring. And, at the Beijing Hotel we finally find a cold beer. □

