

## Studying Nomads on the Tibetan Plateau

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*Tibetan Autonomous Region and nomad research site.*

As we approached Phala Shang, the initial site of our research, we descended an 18,000-foot mountain pass and crossed a 16,000-foot plain, encountering no humans but many antelopes, gazelles, wolves, and graceful Tibetan wild asses. Located about 275 miles northwest of Lhasa, the nomad encampment we approached consisted of three nomad tents pitched beside a spectacular glacial lake at an altitude of 16,100 feet. Although we did not realize it then, this was to be the lowest campsite of the Phala nomads. We eventually traveled to encampments located at altitudes of 17,300 feet and learned that some of these nomads actually moved (with their yaks) to still higher altitudes in winter. For both of us, a dream of many years, if not decades, had finally been realized. We were on the Changtang, Tibet's high and rugged "northern plain," beginning a long-term intensive field study of Tibetan nomads.

### Background

Knowledge of the culture and society of Tibet has been greatly restricted by the inability of Western scholars, particularly social scientists, to conduct field research there. Anthropological village studies in what is now the Tibetan Autonomous Region have never been possible, and anthropologists have had to be content with studying Tibetan-speaking populations living in Nepal and India. This situation changed when China implemented its new "open door" policy, making field research in Tibet a real possibility for the first time.

However, because Tibet is one of China's minority regions, it was not immediately opened to research. In fact, it was only after three years of sustained effort that in 1985 the CSCPRC finally pruned the door open and obtained approval for Goldstein to conduct a linguistic research project in Lhasa. The initial project was for only two months, May and June 1985, but was

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subsequently extended to allow an additional three months in October, November and December. During these five months, a very large corpus of new lexical terms used in Lhasa was collected and two social-linguistic surveys, one in the city and a second in a nearby village, were conducted.

The cordial reception Goldstein received from his host, the Tibet Academy of Social Sciences (TASS), raised the possibility that an extended field study in the Tibetan hinterland might now be possible. Goldstein discussed this with TASS and together with his colleague at Case Western Reserve University, C.M. Beall, submitted a research proposal to TASS and to the CSCPRC.

Upon receiving support from the CSCPRC for our nomad study, we traveled to Tibet in May 1986 to work out the details of our long-term research project with TASS. On June 3, after a three-week stint in Lhasa during which final negotiations were conducted, we signed a formal agreement with TASS to carry out a joint 17-month project on pastoral nomads in Western



*Signing ceremony of agreement between Professors Beall and Goldstein and TASS. Prof. Goldstein is sitting front right. TASS researchers and officials are in the background.*

Tibet, in particular those living in Tsatsey Chu, an area not open to foreigners. The study will provide detailed data on the nomads' social, economic and biological adaptation to their ultra high-altitude homeland. We also hope that it will be able to provide the government of the Tibet Autonomous Region with data and findings relevant to economic development in such areas.

### Reception and Research Conditions

Immediately following the signing of the agreement we left Lhasa for Tsatsey and during June and July, carried out preliminary research. We decided to focus on Phala Shang, a nomad group in Tsatsey Chu consisting of 55 families and 253 inhabitants, for a number of reasons. This group lives far north of Tibet's main east-west highway and is also relatively distant from the Chu headquarters at Tsatsey (three to five days' walk). Residing at altitudes of 16,000–17,800 feet, they are the highest natural population ever studied, an important factor since one of our goals is to study the adaptation of Tibet's nomads to the stress of high altitude hypoxia. They have also maintained their traditional lifestyle. Living in small encampments of one to four families, they manage their herds using traditional pastoral technology and strategies. They still live in tents, hunt with matchlock rifles, collect salt from distant salt lakes, and obtain their grain foods by trading animal products and salt with farmers living 20 days to the southeast. Their beautiful but harsh environment—it snowed several times, and in mid-summer the temperature frequently dropped below



*Prof. Beall measuring nomads in their camp at Bera at 16,300'.*

A Tibetan researcher from TASS arrived some time later, and we expect two or three young Tibetan researchers from TASS to join the team next June when we will begin a 13-month stint of fieldwork.

Our reception in Tibet was exceptional at all levels. TASS supported us completely throughout all phases of the study. The Shang and Chu made their economic and demographic records available, thus providing critical baseline information on the economic situation at the time the commune was disbanded four and a half years earlier. And the nomads themselves were extraordinarily cooperative. Although they had never before seen Europeans, they were hospitable, gracious and patient with our endless questions and measurements. We conducted formal interviews on reproduction, social organization, animal husbandry, and economics with the head of each of the 35 tentholds we encountered, and supplemented these with extensive informal interviews and casual conversations. The nomads visited our tent freely and frequently and we reciprocated at will. Since we lived in the nomad camps, we were also able to observe and record daily life, as well as measure a variety of parameters such as milk/butter production. We visited nine different campsites and obtained biological data on 180 people, which represents 99.9 percent of the individuals we encountered. These data were primarily physiological measurements dealing with topics such as nutritional status, growth, hemoglobin concentration, lung volume, blood pressure, etc. Beall, a physical anthropologist, initiated these measurements.

However, while our access to the subject population was exemplary, the research setting itself posed many logistic and equipment difficulties. We were not physically hampered by high altitude hypoxia, but the unexpectedly fierce summer winds and the frequent

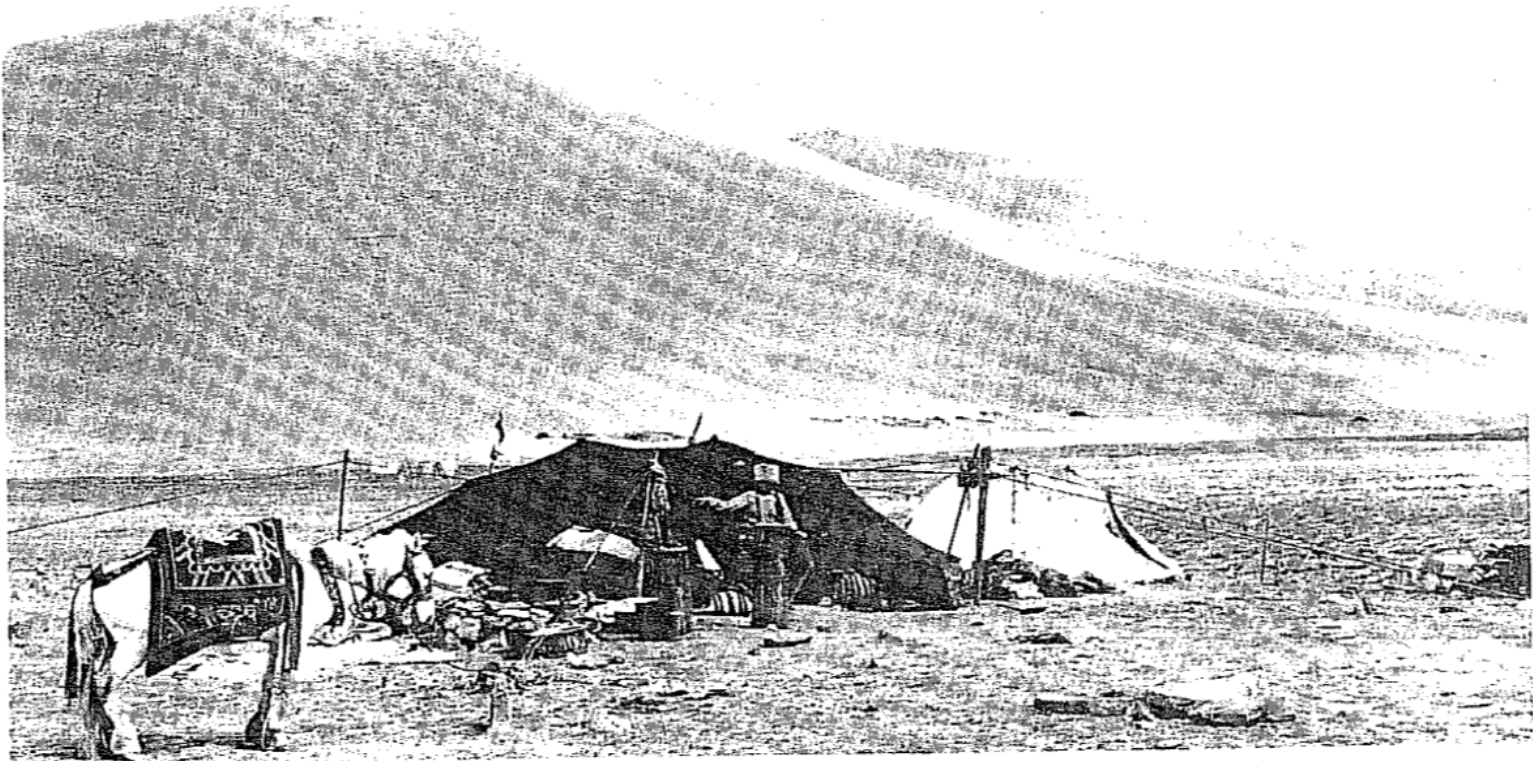
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freezing at night—still contains sizable herds of wild animals, which traditionally played a part in the nomadic adaptation.

We were accompanied to the Tsatsey Chu by a Tibetan research assistant recruited in Lhasa and a TASS official who had served years earlier in a nearby nomad area. The head of the Chu then accompanied us to the Phala Shang and introduced us to the nomads there. The TASS member and the Chu leader then left and we set up our tent and commenced our research.





*Far upper left, nomad yak-hair tents at Chamar, the largest camp in Phala. It was located at 16,500'.*

*Far lower left, nomad firing a traditional Tibetan matchlock rifle, still widely used in hunting mountain goats and antelopes. Nomads slaughter some of their animals for food in late fall and then supplement this with wild game when possible.*

*Left, two nomad women wearing traditional sheepskin dresses (fleece worn on inside) and lambswool hats.*

*Below, young girl with traditional nomad face make-up, known as doja. It is worn by females partly for aesthetics and partly to protect their skin from sun and wind. It is black and is sometimes highlighted by a red circular marking on the cheek. All photos in this article by Cynthia M. Beall and Melvyn C. Goldstein.*



hail/snow/rain storms of summer played havoc with the canvas nomad-style tent we had made in Lhasa. The widely fluctuating temperatures (sometimes 100 degrees fahrenheit in our tent during the day and 30 degrees at night) and the blowing sand also affected our equipment negatively. Moreover, the widely scattered nomad camp sites required us to move our camp

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frequently in order to obtain a meaningful sample. We hired yaks from the nomads to move our tent and equipment, but yaks are rather unruly animals and frequently threw off our loads, damaging quite a bit of our equipment. It also often took days to arrange to hire these yaks (and horses) since they are normally left alone in the mountains quite far from the nomads' tent sites. For the next phase of the study we plan to buy our own horses and are making arrangements to hire our own caravan of yaks. Also, we will obviously have to make better carrying cases.

### **Tentative Observations**

Despite the perseverance of traditional nomadic diet, dress, lifestyle and technology, change has affected these nomads. Until 1959 they were serfs of Tashilhunpo, the seat of Tibet's second great incarnation, the Panchen Lama. After this, there was a period of family production under government-organized formal cooperation, and then in 1970 communes were established. The nomad communes in this area continued until October 1981 when China's "complete responsibility" economic program was instituted. This reform restored the family as the basic unit of production and apportioned all the commune's animals equally among its members. Each person received about five yaks, twenty-four sheep and seven goats at this time. Unlike the rest of China, however, all farmer and nomads in Tibet were declared exempt from taxes until at least 1990. Beijing and Lhasa hope that this will improve the standard of living in Tibet and it is not unlikely that the tax exemption will continue beyond 1990.

China's post-Mao nationality policy has explicitly recognized Tibet's unique cultural homogeneity by

encouraging Tibetans to restore those parts of their cultural heritage destroyed or suppressed during the Cultural Revolution. Consequently, there have not only been tremendous economic changes in the lives of these nomads, but a dramatic cultural and religious renaissance as well. There is now religious freedom in Tibet and the nomads (and others) practice Buddhism as they wish. They conduct ceremonies in their tents, invite Lamas and monks for prayers, and circumambulate the holy sites in their area. In fact, while we were in Tsatsey, the nomads initiated plans to rebuild two small local monasteries that had been destroyed during the Cultural Revolution.

It is obviously too early to draw firm conclusions about the adaptation of these nomads, but preliminarily, it is clear that the new economic policy has substantially improved the quality of life of the nomads in this region and the new cultural policy has been welcomed by all nomads.

In the four and a half years since the division of the commune's herds among its members, although there has been a 19 percent decrease in the number of yak and a 10 percent decrease in the number of sheep, there has been a 281 percent increase in the number of goats per capita. Taking sheep and goats together, there has been a 137 percent increase in herd size per capita. This represents an increase of 11 animals per person during this period. These figures are impressive since these nomads experienced drought during the first three years following dissolution of the commune.

However, it is also clear that not all nomads have benefited equally, and 37 percent of the "tentholds" have experienced a per capita decrease both in sheep and goats combined, and in yaks. The emergence of substantial economic disparity between families appears a real possibility.

The biological data we collected raise a number of questions that will be pursued next year. For example, the nomad diet is exclusively animal products and grain, i.e., they consume no vegetables or fruits, yet they show no obvious signs of vitamin or mineral deficiency. And despite the fact that they consume large quantities of fat and salt from the Tibetan tea (made with butter and salt) they drink throughout the day and from their heavy consumption of meat, cheese and yogurt, they have low blood pressure; we found no cases of hypertension.

As expected, these nomads have higher hemoglobin concentrations than Tibetan-speaking populations living in Nepal at altitudes of 3000-4000 feet lower. However, at the same time, a very important initial finding is that the Tibetan nomads have hemoglobin levels substantially lower than those reported for Andean highlanders, despite the fact that the Tibetans live at altitudes 3000-4000 feet higher than the Andeans. This, in part, supports the argument that the

adaptation of Himalayan (and now Tibetan) natives to high altitude hypoxia may be different than that of Andean natives.

These are obviously very tentative and preliminary observations that may change as a result of analyses now underway and new data collected during the next phase of the study. They indicate, however, some of the parameters we will be studying next year.

Finally, we want to emphasize that this research would not have come to fruition without the expertise and commitment of the CSCPRC. It worked energetically to make research in Tibet a reality. We hope that our good fortune is just the beginning, and that other American researchers will soon be able to initiate similar social science research projects in the Tibet Autonomous Region.

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