

OVER THE HIGH PASSES

Frank Harold

University of Washington, Seattle (USA)

Photographs by **Ruth Harold**

At the heart of the Asian continent sprawls a knot of colossal mountains. Whether the journey takes you north across the plains of India, west from China or east through the deserts of Turkestan, giant ramparts of rock and ice rear up to bar the way. The immensity of that uplift is best grasped from the air: fly from Delhi to Kathmandu, or from Chengdu to Lhasa, and marvel at the sea of whitecaps below, range upon range as far as the eye can see. It is hard to credit that men on foot, guiding laden animals, could have routinely traversed these forbidding wastes.

But they did, year after year for many centuries, and in a few places they still do so today [Fig. 1]. Merchants, missionaries and bandits worked their way up the river gorges and located the passes that offered access to the lands behind the ranges. The Silk Roads and their feeders traversed the Pamirs, the Karakoram, Hindukush, Tien Shan and the Great Himalaya, not to mention a score of lesser ranges. Other routes skirted the mountains, passing across the Gobi Desert and north of the Tien Shan, down the Ili Valley. Travelers carried their goods on the backs of camels, yaks, horses, mules, even sheep and goats, often supplemented by files of overburdened porters; and all of them left their bones along the tracks that knit the disparate regions of Eurasia into a globalized economy. Today's travelers, sped on their way by paved roads and concrete bridges, encounter few of the hardships that earlier wayfarers took in their stride; but the landscape remains much as they saw it, and here and there an ancient town or crumbling building recalls the old days. This article is a tribute from a latter-day traveler to all who went before, especially to

those who told us of their journeys.

The Routes

Where did those mountain passages run, and how do we know that? In the nineteenth century, European explorers began mapping the mountains systematically, sometimes for the sake of geographical knowledge alone, more often with economic or political ends in mind. One of the first was William Moorcroft (1767 – 1825), a veterinarian ostensibly in search of superior stud horses to improve the breed of cavalry mounts for the army in India. His two semi-official expeditions took him into Tibet, Ladakh, Kashmir and Afghanistan; he reached Bukhara, but died of fever on the way home. Other adventurers followed, chiefly British and Russian, during a century of intense exploration between 1830 and 1930. The context was supplied by the Great Game, the rivalry between the British and Russian empires for mastery of Central Asia. Some of the most valuable work was done by the 'pundits,' native Indians who could pass in those parts without attracting undue attention, and who were trained to conduct basic surveys in secret. Western scholars came next, including Col. Henry Yule who worked out the historical background, and the redoubtable M. Aurel Stein and Sven Hedin. Thanks to their labors we know what routes were used in the nineteenth century, and can extrapolate back to earlier times.

Fig. 1. Yak caravan on the high pass between Nepal and Tibet, Mt. Shishapangma in the background. Photograph courtesy of Vassi Koutsaftis. Copyright © Vassi Koutsaftis <<http://www.arclight-pictures.com>>.



The map [Fig. 2] shows the main traditional trade routes across the western portion of the Himalayan uplift, omitting many local routes for the sake of clarity. Another net of tracks extended eastward, to Lhasa in Tibet and beyond, linking up with the Tea and Horse Road. To make sense of the map, note the major drainages. The Indus River, rising far to the east on the Tibetan Plateau, drains a vast basin that includes both the northern and the southern flanks of the Great Himalaya, and

also the southern slopes of the Karakoram and Hindukush. The Tarim River runs eastward, to be lost in the sands of the Taklamakan Desert. The Amu Darya (the Oxus of the classical literature) runs west from the Pamirs into the Aral Sea; so does the Syr Darya (classical Jaxartes), from the central and southern Tien Shan. The continental watersheds along the crests of the mountains thus divide the main river basins: the Karakoram Mountains separate the Indus from the Tarim; the Pamir Plateau

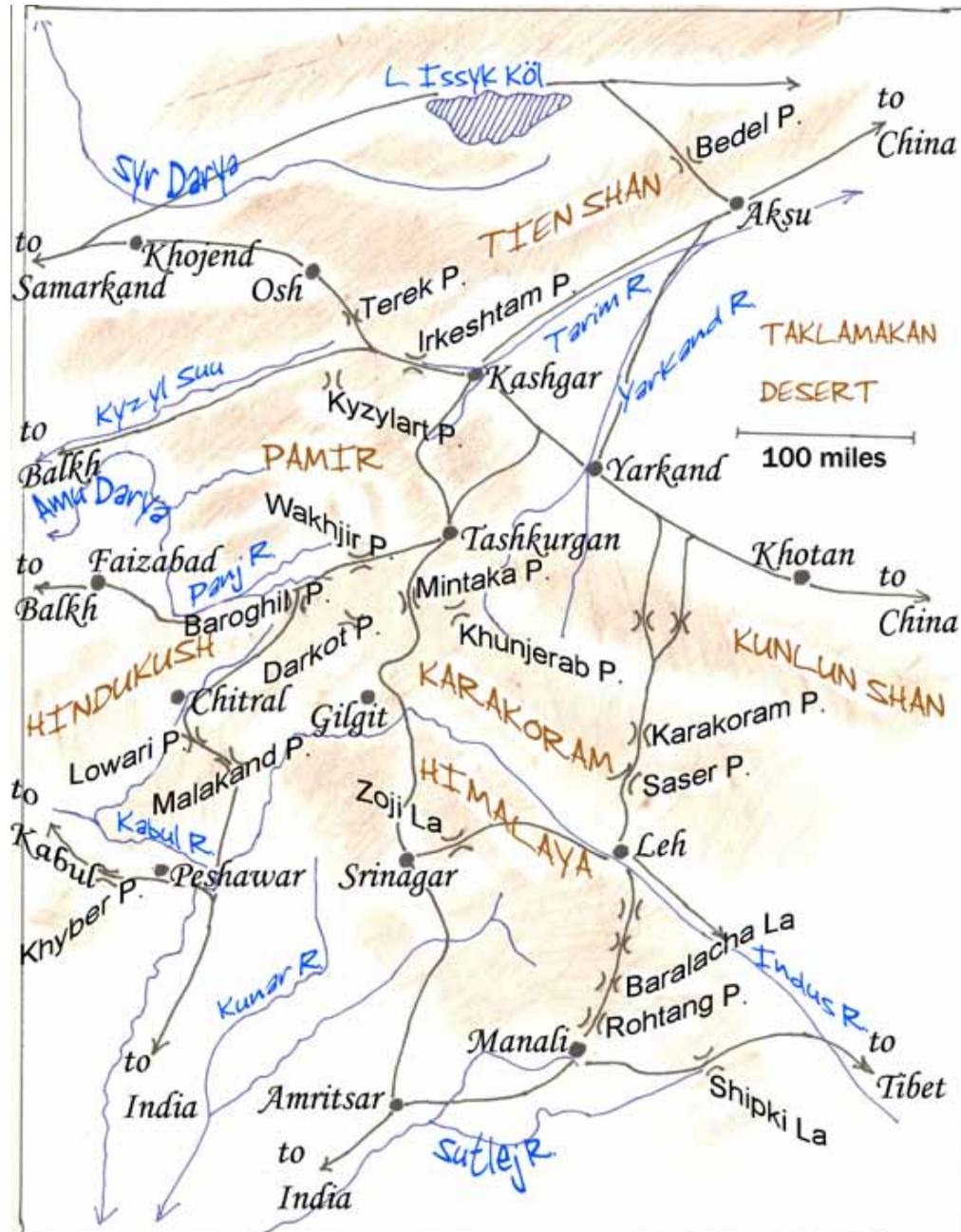


Fig. 2. Traditional trade routes of the Western Himalayas.



Fig. 3. The Great Himalaya from just above the Baralacha La, between Manali and Leh, 1991.

and Hindukush divide the Indus from the Amu Darya; and the Tien Shan (the 'Heavenly Mountains') lie between the Tarim and the Syr Darya. Only seven significant routes traversed that enormous highland arc. Clockwise from India these are the Karakoram, Gilgit and Chitral routes; two from Afghanistan, via the Wakhan (upper Oxus) and the Kyzyl Suu valley; from Samarkand in Central Asia, by way of the Ferghana Valley and the Terek Pass; and finally from the steppes north of the Tien Shan, via either the Bedel Pass or the Muzart Pass. Let us take them in turn.

The principal caravan route between the plains of India and China ran from Amritsar (and nearby Hoshiarpur) to Yarkand by way of Ladakh, and then across the Karakoram Pass, a journey of sixty days. The distance is less than 400 miles as the crow flies, but bipeds and quadrupeds were obliged to cross a succession of laborious passes. First came the Rohtang Pass into Lahoul, then the Baralacha La (4,891 m/16,047 ft; Fig 3) across the Great Himalaya (for some reason, certain passes are commonly designated by the English word, others by its Tibetan equivalent, 'La'). Several yet higher passes crossed the Zaskar Mountains before the track descended to Leh, the capital of Ladakh on the Indus River. Leh

could also be reached from Srinagar in Kashmir, by way of the relatively easy Zoji La (3,529 m/11,580 ft); that was the only way a laden animal could be taken into Ladakh from Kashmir. Leh was a major entrepot, particularly for the trade in 'pashm,' the soft warm undercoat grown by a particular breed of domestic goat raised on the frigid uplands of western Tibet. Pashm is the raw material for the pashmina shawls, woven exclusively in Kashmir and distributed throughout India and even to Europe. Leh is very quiet today, but many relics remain from the time when it was the capital of an independent Buddhist kingdom [Figs 4 and 5]. The ruined palace of the Gyalpos still looms over the town, the bazaar operates from



Fig. 4. Leh with the palace of the former kings of Ladakh, 2001.



Fig. 5. In the bazaar, Leh, 2001.

Fig. 6. Lamayuru Monastery, on the high road from Leh to Kashmir, 2001.

its old site, and many of the nearby monasteries date back to caravan days (Fig. 6).

Northward from Leh the track led across the notorious Karakoram Pass — not particularly difficult and usually open even in winter, but cold, bleak and very high (5,540 m/18,176 ft). The chief obstacles came before and after, especially the glacier-bound Saser Pass. There were no settlements along the route and very little grazing; food and fodder had to be carried for at least 14 days. All travelers comment on the route's melancholy air, marked as it was by numberless skeletons of pack animals that had perished along the way. There was the intense cold in winter, bugs and flooded streams in summer, and at all seasons the danger from raiders 'licensed' by the mir of Hunza, in search of booty and slaves. None of this proved a serious deterrent to trade. G. T.



Vigne, who traveled in Ladakh in the 1830's, reported that 'the merchandise that travels from Yarkund [*sic*], via Ladakh to Hindustan, consists of gold in ducats from Russia, in old coins from Bukhara, silks, silver and porcelain from China, musks, furs, sables ...tea of three kinds' and other luxury goods. Janet Rizvi, who gives a detailed account of that commerce, adds further items: felts and carpets, very popular in Leh, and charas, the marijuana of the day. Goods taken north from India included spices, sugar, indigo, fine finished muslin and silk cloth, and the irresistible opium. Later in the century Indian tea and English woollens and broadcloth joined the list, with the balance of trade in India's favor. The trade was controlled by a handful of established and wealthy families. Yarkandi merchants resided in Leh, Punjabis in Yarkand, and British missions to western China found organized communities of the Empire's citizens at trail's end.

An alternative but no less challenging route ran from Srinagar in Kashmir to Kashgar via the remote outpost of Gilgit, deep in the mountains on the western side of the Indus. It continued north into the domains of the mirs of Hunza, independent until the British subdued Hunza in a lovely little war in 1891, putting a stop to the agreeable occupation of caravan raiding. Hunza remains one of the most spectacular places on earth, a fruitful valley at the foot of stupendous mountains that soar abruptly to 24,000 ft; the castles of the mirs, built more than 700 years



Fig. 7. Baltit Fort looms over the valley of Hunza in the Karakorams, 2008.

ago, still brood over the villages (Fig. 7). But all who passed this way remember the terrifying gorges of the lower Karakoram, 'as difficult a tract of country as can be found anywhere in the world. In the gorges by which the Hunza River cuts its way....the road, seldom more than 2 feet wide and often much less, is carried from ledge to ledge of the almost perpendicular cliffs on stakes let into the rock; glaciers, of which the greatest is the seventy-mile-long Batura, have to be crossed, and falling rocks dodged on the numerous "stone-shoots" where no path can be kept up and the traveler must pick his way apprehensively across the unstable mountain-face' (Skrine 1925, p. 232). In places the cliff path, long disused, can still be seen today [Fig



Fig. 8. Cliffside track in the gorge of the Hunza, 2008.

8]. Several days and many gorges later the track crossed the mountain crest, usually by the Kilik or the Mintaka Pass (4726m/15505ft) — glaciated but not too arduous as these things go. The Khunjerab Pass nearby, which today carries the Karakoram Highway, was seldom used. From the pass the track descended to the Chinese frontier post of Tashkurgan, and thence by a choice of routes to Kashgar. C.P. Skrine and his wife, who traveled that road in 1922 to take up his appointment as British Consul General in Kashgar, spent seven weeks en route, and clearly had the time of their lives; but since the Gilgit route would have been difficult for heavily laden animals, it seems unlikely that it ever served as a major artery of trade. Indeed, Skrine sent his heavier baggage via the Karakoram Pass route starting in Leh.

Further still to the west, the third route ran via the semi-independent principality of Chitral, and then crossed the fearsome Hindukush ('Hindu Killer') Mountains by the Baroghil Pass. Notably

low and gentle at a mere 3,804 m/12,480 ft, the Baroghil gives access to the district long known as Wakhan: the uppermost headwaters of the Oxus (Amu Darya), locally called the Panj River. Today, this area is part of the Wakhan Corridor, a narrow salient of Afghanistan that separates Pakistan from Tajikistan (see map, Fig 11, p. 81). Keeping the Russian and British empires apart was precisely the object of creating this unwieldy border. From the junction at the northern foot of the Baroghil Pass, one track followed the Panj downstream into Afghanistan; the other led eastward into China, across the demanding Wakhjir Pass (4,923 m/16,152 ft). M. Aurel Stein, whose indifference to physical hardship was legendary, struggled across this route in the snowy spring of 1906 and was not dismayed. Westerners seldom came this way, because it led through the territory of the unruly tribes of the Northwest frontier, and required permission from the Emir of Afghanistan; but it seems to have been a significant trade route in earlier times. In the 20th century, this also became a favorite road for pilgrims traveling from East Turkestan to Mecca: they would cross the Pamirs in April, make their way via Chitral and Peshawar to Bombay, and then take ship for Jeddah.

Merchants on the Silk Roads that linked China with Central Asia and points west could choose among several options. Coming from Afghanistan they would make for Faizabad, and thence cut across to the Wakhan valley (the lower reaches of the Panj River, hemmed into tremendous gorges, were utterly impassable until the Russians blasted the first bridle path out of the cliffs, late in the 19th century). Lt. John Wood of the Indian Navy, who explored this area in 1837 on his quest for the sources of the Oxus River, supplies a lively description of his journey in the depth of winter. From the upper Panj valley one could take the Baroghil Pass for India, or the Wakhjir into China. Both the Chinese pilgrim Xuanzang and Marco Polo came through the Wakhan, which was clearly far more traveled in the Middle Ages than it is today.

An alternative approach from Afghanistan, and in principle a much more inviting one, crossed the Oxus well downstream, near Balkh (today's Mazar-e-Sharif), and continued by way of Hissar (just west of today's Dushanbe, capital of Tajikistan); the route then climbed onto the Pamir Plateau via the valley of the Kyzyl Ssu



Fig. 9. Irkeshtam Pass, easy grasslands and spectacular scenery, 2008.

(Red River). The valley is wide, well watered and offers ample pasturage all the year. At the head of the Kyzyl Suu, an easy pass across the grassy ridges of Irkeshtam (about 3000m/10,000ft; Fig 9) leads into China. Both Col. Henry Yule and Sir Aurel Stein argued persuasively that this valley must have been a major conduit of trade (as it is today, carrying heavy truck traffic between Kashgar and Dushanbe).

The trunk road from Central Asia led from Bukhara and Samarkand into the Ferghana Valley, and thence to Kashgar by way of the Terek (4,128 m/13,540 ft) and Irkeshtam Passes. This route became doubly attractive after the Russians constructed a railroad to Andijan in the Ferghana Valley; even the British Consul General in Kashgar, Russia's arch-rival for influence in Central Asia, came this way until it was closed by the Bolshevik Revolution. Travel time from Andijan to Kashgar was a mere twelve days: by coach to Osh, and then on horseback over the passes. Sven Hedin availed himself of the opportunity in 1899 on his way to Tibet and the Gobi Desert; he describes the route in detail, and once the railroad had been left behind, even in high summer it seems to have been no picnic.

Finally, and to round out the roster, tracks connected China and Central Asia across the Tien Shan, by way of either the Muzart Pass (off the map, open only in summer) or the Bedel Pass. The Tien Shan are high and rugged, challenging even mountaineers equipped with

wheels and gears [Fig. 10], but they offered short and direct links to major caravan routes along Lake Issyk K l and across the Gobi Desert into China proper. Owen Lattimore and his wife Eleanor, who spent their honeymoon on an epic journey from Peking to India in 1927, crossed the Muzart Pass (and later on, the Karakoram as well). The ascent to the grassy summit at 3602m/11,818ft was deceptively easy, but the long descent via a rotting and crevassed glacier, in fog and rain, was quite another matter.

Classic Journeys

Thousands of merchants, monks, envoys and soldiers must have crossed the high passes in centuries past, but left no record of their passage beyond occasional graffiti on the rocks. Historical geographers must perforce rely on the few who wrote about their experiences, and fill in the details by matching the early accounts against those of more recent travelers.

The earliest tantalizing fragments come from the Greek geographer Ptolemy (2nd century CE), who recounts the journey of certain merchants across half of Asia to the land of the Seres, whence came silk. Neither Greeks nor Seres traveled the whole way; rather, they met beyond 'Mount Imaus,' at a place called the 'Stone Tower.' Mount Imaus is generally identified with the Pamir, but the location of the Stone Tower has given rise to much fruitless debate. The town that goes by this name today, Tashkurgan in far western China, remains one candidate. The crumbling fort that stands there is not ancient, but Stein found ruins of a far older one on the road south into the mountains. Nevertheless, both Stein and Yule prefer to put the Stone Tower in the western Pamir, possibly



Fig. 10. Wheels on the Kegeti Pass, northern Tien Shan Mountains, Kyrgyzstan. Copyright   1995 Daniel C. Waugh.

in the valley of the Kyzyl Suu.

The most detailed account by far comes from Xuanzang (Hsüan Tsang), a Chinese pilgrim who journeyed to India in search of authentic Buddhist scriptures. Xuanzang set out secretly in 629 CE, in defiance of the emperor's ban; he returned in triumph sixteen years later, was pardoned and showered with honors, and settled down to pen the memoirs that make up our best source of first-hand information about the geography, politics and culture of Central Asia just prior to the coming of Islam. Best of all, he tells us exactly where he went (Sally Wriggins' contemporary account features detailed maps). On the way out he traveled to Aksu, and then made a harrowing traverse of the Bedel Pass in early spring, with the loss of many men and beasts. The survivors recuperated at warm Lake Issyk Köl, and then followed a route around the mountains rather than through them. Xuanzang traveled by way of Samarkand, Balkh, Bamiyan and Kabul, then across the Khyber Pass into India. But on the way home, leading a large party complete with an elephant and burdened with sacred books and statuary, he tackled the high passes. They traveled to Kabul, crossed the Hindukush by the high and snowy Khawak Pass, and then marched east up the Wakhan Valley. Xuanzang's 'Great Dragon Lake' is almost certainly the same as Lake Zorkul, or Sirikol, that spectacular source of the Oxus River on Bam-i-Dunya, the very roof of the world first introduced to Western scholars by the explorations of Lt. John Wood. They may have crossed the watershed at the Wakhjir Pass, but more probably utilized an easier route further north, eventually reaching Tashkurgan. The elephant, having made it across one snowbound pass after another, was lost in an attack by bandits as the expedition was threading the gorges on the way to Kashgar. The future held eternal fame as one of the greatest travelers of all time, symbolized by the familiar image of Xuanzang as a monk, toting on his back a frame pack full of scrolls.

There was never a shortage of violent strife in the high hills (Hunza and its neighbors being especially notorious), but to my knowledge only once were they the scene of a genuine military campaign. In 747 CE the Chinese general Gao Xianzhi led an army of 3000 out of Tashkurgan to conquer Hunza and Gilgit, then under Tibetan occupation. That required marching men and supplies over the Wakhjir

Pass, the Baroghil, and finally over the Darkot Pass (4575m/15010ft.), into the Hunza Valley. The hardest part will have been the Darkot, a spectacular and heavily glaciated notch in a high spur of the Hindukush (for a description see M.A. Stein's account [1912, I, pp. 52-60] of his own lightning foray to the pass in 1906). The expedition was a resounding success, and made a big impression on the Natives: C. P. Skrine notes that, even though the Chinese withdrew after a few years, as late as the nineteenth century the mirs of Hunza were still sending tribute to Kashgar.

For Westerners, the epitome of the far traveler is Marco Polo, the youthful Venetian who, in 1271 CE, accompanied his father and uncle on a mission to the Great Khan in Khanbaliq (today's Beijing). Marco's Description of the World, dictated years later in a Genoese prison while awaiting ransom, is clear enough on his general route but often short on detail. Having reached Balkh (in northern Afghanistan), the Polos made their way to Faizabad, then into the upper Oxus and east across the high country. 'The plain is called Pamier, and you ride across it for twelve days altogether, finding nothing but a desert without habitation or any green thing, so that travelers are obliged to carry with them whatever they have need of. The region is so lofty and cold that you do not even see any birds flying. And I must notice also that because of this great cold, fire does not burn so brightly, nor give out so much heat as usual, nor does it cook food so effectually.' (Yule translation; medieval travelers in general had no understanding of the nature of high altitude.) Just where was Marco? On the Pamir Plateau, clearly, though his comment on the absence of birdlife will be belied by anyone who has stood beside one of the many ponds in summer. It is simply not clear where he crossed, or why it ultimately took forty days to do so.

I must not conclude this section without acknowledging one of my personal heroes, Marc Aurel Stein (1862 - 1943). The British have a particular talent for nurturing men (and women) who combine physical prowess with excellence in scholarship, and Stein is a prime example. Born in Hungary into a Jewish family that had converted to Christianity, M. Aurel Stein became fascinated with India as a student, first in Germany and later in England. Having cultivated the right friends, he secured an appointment in India, first in administration

and later with the Archaeological Survey. Stein's abiding passion proved to be archaeological exploration, and by dint of infinite patience and persistence he wrangled funds and leave to pursue it. Three major expeditions to Central Asia took him deep into the Taklamakan Desert to excavate ancient Buddhist sites along the Silk Road. His most celebrated achievement was the acquisition of a great trove of manuscripts and paintings in Dunhuang, which Stein rescued (some would say, looted) on behalf of the British Museum. But Stein also loved the high mountains, and the wilder the better. A small man, wiry, tough and inured to hardship, he seized every opportunity to traverse and survey the high passes, and to examine that landscape with the sharp eye of one who was both archaeologist and geographer.

Rich in honors, including a knighthood, one ambition persistently eluded Stein: political obstacles always stood in the way of archaeological work in Afghanistan. At long last, in 1943, an invitation was granted. Stein was nearly 81 years old, but would not let that deter him. He fell ill shortly after arriving in Kabul, died and was buried in the foreign cemetery there, where his epitaph is an eloquent tribute:

Mark Aurel Stein
of the Indian Archaeological Survey
Scholar, Explorer, Author
By the Arduous Journeys in
India, Chinese Turkistan, Persia and Iraq
He Enlarged the Bounds of Knowledge.
Born at Budapest 26 November 1862
He became an English Citizen in 1904.
He died at Kabul 26 October 1943.
A man greatly beloved.

Doing it in Comfort

Well into the 20th century, the mountain world that travelers experienced owed more to Marco Polo's time than to our own. Men and goods moved at a walking pace, on the backs of animals; they relied on peoples who had lived on that land for centuries, chiefly the Kyrgyz herdsman and Tajik farmers; and what passed for central authority was far away. Contemporary events, especially the Second World War, unleashed change with a vengeance. Politically and technologically, today's wayfarer inhabits a world far different from that which Sir Aurel Stein knew [map, Fig 11].

With the rise of the People's Republic of China, followed by a war with India in 1962, the border between them closed and trade across the Karakoram Pass ceased. Pakistan split away from India, and that border, too, was effectively blocked. The Soviet Union shut off access to Central Asia, except for tours managed by Intourist (in 1970, when we came to the Soviet embassy in Tehran to inquire about entry from Afghanistan, they wouldn't even let us in the door). Afghanistan is still in a state of war, Kashmir is in turmoil and Pakistan increasingly dicey. The Karakoram Pass, Chitral and the upper Oxus are more remote today than they were a century ago. But this litany of troubles tells only half the story.

Fig. 11. Mountains of Central Asia by road.





Fig.12. Rohtang Pass, between Manali and Leh, 1991.

China and Pakistan developed cordial relations, and constructed a motor road linking Kashgar and Islamabad across the Khunjerab Pass; it was opened to foreign travelers in 1986. In the aftermath of India's wars with Pakistan and China, Ladakh became more closely integrated with India than ever before; you can drive there now. And in 1991, the collapse of the Soviet Union spawned five independent republics in Central Asia. These five countries are prickly with tourists but eager for their hard cash and for the economic benefits of trade via the historic overland routes. So roads have opened from China into Kyrgyzstan over the Torugart and Irkeshtam Passes, and now also clear across the Pamir Plateau. Even those of us who are young only at heart can today explore large portions of those storied mountains by road, in reasonable safety and comfort.

A prime destination is Ladakh, that lofty high desert beyond the Great Himalaya — politically part of India, but culturally Tibetan. There are direct flights from Delhi to Leh, and good accommodations. Overland, it's a spectacular three-day drive from Manali: across the Rohtang Pass (3978 m/13051 ft; Fig 12), which divides 'the bedlam of rural India from the vast silences of Lahoul'; then by the Baralacha La over the Himalaya proper, followed by the Taglang La (at 5,359 m /17,582 ft one of the world's

highest road passes), before dropping down to Leh at 12,000 ft. Of all the towns in Central Asia, Leh remains the most traditional, and life in the monasteries and villages is far more representative of Tibet than what you see in Tibet itself [Fig 13]. Regulations have recently been relaxed to allow foreigners to cross the high Kardung La, the first obstacle on the caravan road to Yarkand, but the Karakoram Pass remains out of bounds. Open, too, but dubious is the road over Zoji La to Srinagar. We hope to see the day when that route, and the fabulous Vale of Kashmir, become once again sensible tourist destinations.

Fig. 13. Women at Alchi, Ladakh, displaying traditional finery, 2001.



Of the three historic links between the Punjab and China, only the Gilgit route is open at present, closely tracked by the Karakoram Highway. The road crosses the range at the Khunjerab Pass (4,934 m/16,188 ft), a few miles east of the traditional Mintaka Pass, perhaps because the Khunjerab Glacier is better behaved and does not menace the road [Fig. 14, facing page]. This is some of the most vertical landscape on earth; it makes a long but spectacular drive, with a break at Tashkurgan. We traveled the length of the Karakoram Highway in 1997: from the ancient caravan city of Kashgar, at that time still redolent of Central Asia, past Karakul



Fig. 14. The Khunjerab Pass across the Karakoram Mountains, watercolor by Ruth Harold, 2008.

via the valley of the Kyzyl Suu, is said to be very rough but carries much commercial traffic. It was a journey to lift the spirit: thank you, Roger, we are forever in your debt.

From a half-century of travel we have learned that, as the world turns, windows open and windows close. If you have a hankering to see for yourself 'the hills and the snows of the hills,' do not put it off. For the world keeps turning, and the only certainty is that things will change again.

Lake and over the pass, down into the gorges of the Hunza and Indus Rivers, all the way to Islamabad with detours to Swat, Peshawar and the Khyber Pass. A wonderful itinerary, but not altogether comfortable just at present.

We were fortunate to return to the mountains in 2008, with a small group of intrepid travelers led for Wilderness Travel by the one and only Roger Williams. From Kashgar, we first drove south into Hunza — peaceful, quiet and as welcoming as ever. After returning to Kashgar we headed west, to cut the Pamir Knot. The road lay across the Irkeshtam Pass, its grasslands dotted with the yurts and flocks of Kyrgyz herdsmen.

The road is appalling, even for jeeps, but the views of the Trans-Alai Range are tremendous. At the village of Sary-Tash in the Kyzyl Suu valley we picked up the Pamir Highway, originally a military road built by the Russians to help secure their turbulent eastern frontier, and now badly in need of maintenance. For the next four days we followed the Pamir Highway south and southwest: across the Trans-Alai Range at the Kyzylart Pass, along Great Karakul Lake, across the broad Pamir steppes [Fig. 15], and down to Khorog on the Panj River, the only substantial town in the Pamir region. Here the Panj, running through imposing gorges, forms the border with Afghanistan [Fig. 16], whose traditional villages, little changed over the past forty years, contrast with the modernized settlements on the Tajikistan side. We ended up in Dushanbe, the capital of Tajikistan, the modern city which has replaced the former caravan halt of Hissar. The direct road, from Irkeshtam to Dushanbe

About the Authors

Frequent contributors to this journal, **Frank and Ruth Harold** are scientists by profession and travelers by avocation. Frank was born



Fig. 15. Pamir landscape, 2008.

Fig. 16. In the gorges of the Panj River, 2008.



in Germany, grew up in the Middle East, and studied at City College, New York, and the University of California at Berkeley. Now retired from forty years of research and teaching, he is Professor Emeritus of biochemistry at Colorado State University and Affiliate Professor of microbiology at the University of Washington. Ruth is a microbiologist who studied at the University of Arizona and the University of California at Berkeley; now retired, she is an aspiring watercolor painter. The Harold family lived in Iran in 1969/70, while Frank served as Fulbright Lecturer at the University of Tehran. This experience kindled a passion for adventure travel, which has since taken them to Afghanistan and back to Iran, across the Middle East, into the Himalayas and Tibet, up and down the Indian subcontinent, and along the Silk Road between China and Turkey. They can be reached at <frankharold@earthlink.net>.

Sources

The basic scholarly references are the writings of Sir Henry Yule: *Cathay and the Way Thither*, 4 vols. (London: Hakluyt Society, 1866; rev. ed. 1916); *The Book of Ser Marco Polo*, 2 vols., 3rd ed. (London: Murray, 1903) (available in electronic form at Project Gutenberg <<http://www.gutenberg.org/etext/10636>>); and his 'Essay on the Geography of the Valley of the Oxus' (included in Capt. John Wood's *Journey to the Source*, etc, below). More recent works include Janet Rizvi, *Trans-Himalayan Caravans: Merchant Princes and Peasant Traders in Ladakh* (New Delhi: Oxford Univ. Pr., 1999), a comprehensive account of the traditional commerce of Ladakh, based on interviews with men who took part in it; and Sally Hovey Wriggins, *Xuanzang – a Buddhist Pilgrim on the Silk Road* (Boulder, CO: Westview, 1996). An excellent article on 'The Roads to Kashgar' by C. P. Skrine (*Journal of the Royal Central Asian Society* 12 (1925): 226 – 250), covers the present subject; it would have saved me many hours had I found it earlier!

The counterpart to the routes discussed here is the Tea and Horse Caravan Road, far to the east. See Jeff Fuchs, 'The Tea Horse Road,' *The Silk Road* 6/1 (2008): 63 – 71, and Yang Fuquan, 'The "Ancient Tea and Horse Caravan Road," the "Silk Road" of Southwest China,' *The Silk Road* 2/1 (2004): 29 – 32.

Western travelers have left an abundant literature. Moorcroft's pioneering account has been published in a much truncated version edited by Horace H. Wilson, as William Moorcroft and George Trebeck, *Travels in India Himalayan Provinces of Hindustan and the Punjab, in Peshawar, Kabul, Kunduz and Bokhara from 1819 to 1825*, 2 vols. (New Delhi; Madras: Asian Educational Services, 1989; reprint of 1841 ed.). I have drawn on Godfrey Thomas Vigne, *Travels in Kashmir, Ladakh, and Iskardo* (London: Coburn, 1844, reprinted, Delhi: Sagar Publications, 1981); John Wood, *A Journey to the Source of the River Oxus* (London: Murray, 1872); M. Aurel Stein, *Ruins of Desert Cathay*, 2 vols. (London; New York: McMillan, 1912; repr. New York: Greenwood, 1968); M. Aurel Stein, *On Ancient Central Asian Tracks* (Chicago: Univ. of Chicago Pr., 1933; repr. 1964); Sven A. Hedin, *Central Asia and Tibet*, 2 vols. (New York: Scribner, 1903); Clarmont P. Skrine, *Chinese Central Asia*, London: Methuen, 1926; various later eds.); and Owen Lattimore, *High Tartary* (Boston: Little, Brown and Co, 1930; repr. ed. New York: Kodansha, 1994). For Stein's grave, see the photos and brief account of a visit in 2000 by Victoria Finlay in *IDP News: Newsletter of the International Dunhuang Project* 18 (2001) <http://idp.bl.uk/archives/news18/idpnews_18.a4d#5>.

The Great Game and the story of Himalayan exploration have been lovingly recounted by John Keay in *When Men and Mountains Meet: The Explorers of the Western Himalayas 1820-75* (Hamden, CT: Archon, 1982) and *The Gilgit Game: Explorers of the Western Himalayas 1865-95* (Hamden, CT: Archon, 1979; reprinted Karachi, etc.: Oxford Univ. Pr., 1990), and by Karl E. Meyer and Shareen Blair Brysac in *The Tournament of Shadows* (Washington: Counterpoint, 1999). Boys between the ages of 8 and 80 should on no account miss Rudyard Kipling's novel, *Kim*; if that does not stir a longing for those 'hills and the snows of the hills,' you have no soul!

The maps are based on multiple sources, including the one in Janet Rizvi, *ibid*; Yuri Bregel, *An Historical Atlas of Central Asia* (Boston: Brill, 2003); and the contemporary road maps published by Nelles Maps. With one or two exceptions, elevations of the passes (concerning which various sources have some discrepancies), have been taken from the military topographic maps published in Pakistan, Russia and Kyrgyzstan.

Finally, I am indebted to Vassi Koutsaftis and Daniel Waugh for permission to reproduce their photographs in Figs. 1 and 10, respectively.