The Lion River

The Indus

Jean Fairley
THIS BOOK WAS WRITTEN FOR
ANTONIO GOMEZ ORBANEJA
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JEAN FAIRLEY
INTRODUCTION

The Indus begins in Tibet, issuing from a small spring called ‘the mouth of the Lion’. It was not until 1907 that the first European discovered and mapped this spring.

From its source, gathering water from innumerable glacier-fed streams and from several rivers as large as itself, the Indus rushes down a gutter running more or less directly north-west between the greatest mountain ranges in the world, the Karakoram and the Himalayas. Leaving Tibet it tears down to India and across the U.N. casemate line in Kashmir that divides India from Pakistan. From here on it is Pakistan’s river.

The mountains crowd it closer and it is forced to turn sharply to the south-west. Twisting and doubling through fearful gorges it finally breaks out of the Himalayas. Then, for nearly a thousand miles, it winds and wanders across the flat plains of Pakistan to the Arabian Sea.

The people who live near the river, and the history it has seen, are of a quality as varied as the country it runs through. Squat, high-cheekboned nomads graze their flocks on the pastures between the high Indus and the snow-crowned mountains that contain it. Pathans with Grecian profiles pursue vendettas in the bare and savage hills along its middle stretches. In the plains short, wiry, dark-skinned men float pitchers of buffalo-milk from its reedy islands and cultivate melons on its muddy shores; here the Indus cradled a civilization nearly as old as those of the Nile and the Euphrates and more than four thousand years ago the peasant, lifting his eyes above the level fields of corn and sugar cane, would often have seen the great, square sails of the river cargo boats bellying out before the monsoon. From Central Asia hordes of barbarians repeatedly swept eastwards across the Indus, looting, destroying, and slaying the river people in thousands. Hindu kings once fought and hunted near the river. Buddhist monks built huge monasteries on its banks, Chinese pilgrims struggled along perilous cliffs to the Buddhist shrines.
Three hundred years before Christ died, Alexander of Macedon led his troops across the Indus and, on their retreat from India, took them downriver with a fleet he had constructed on one of its tributaries. A thousand years later the Arabs began to thrust into the Indus valley and Islam became predominant. Tribesmen from the Afghan mountains raided down to the river continually. In the sixteenth century the founder of the Mogul dynasty crossed it on his way to Delhi; in the nineteenth, the British arrived on the Indus from their far-away Atlantic islands, and their fifes and bagpipes shrilled along it for over a hundred years; in the twentieth, when India was partitioned, blood and bodies—as so often before—floated south on the river current.

Life has always been hard and dangerous in the Indus valley and today, as for thousands of years, the people who live here face famine and flood, dissension at home and invasion from abroad. But the great river itself, only partly tamed, is still often their greatest enemy.

It has many names. In Tibet it is 'the River issuing from the mouth of the Lion'. In the gutter between the Karakoram and the Himalayas people call it 'the Eastern River', because it comes to them from the sunrise. Breaking out of the mountains, already rich in tributaries and known to be shortly in receipt of others, it is 'Abasin', the Father of Rivers. In ancient times it was 'the Sindhu', meaning divider, keeper or defender; this name was gradually changed to Indus and was given to the whole subcontinent (in fact it would be more fitting for modern Pakistan to bear the name of India than its great easterly neighbour). In its lower reaches, where it spreads widely over the sands, the river was once known as the 'Ocean' and, at its delta, as the 'Freshwater Sea'.

Of all these names the first seems to me the most apt, for the Indus is a lion throughout its course. It is beautiful, powerful, unpredictable and dangerous. Sometimes, of course, it can be gentle: above its upland shallows the poplars rustle, and over its wide lower reaches the early mists cast a soft and magical light. A prince once counted the variety of tulips near its banks, an emperor discussed God while he waited to cross it, a British general lunched on partridges on a bridge of boats and laughed to see his elephants enjoying their bathe. But for the most part, both in time and space, the Indus is cruel, and as ruthless and cunning as any lion.

I knew it for two years; by car and aeroplane, by jeep and
boat, on horseback and on foot, I saw as much of the Indus and its terrain as was allowed. Although it is one of the world’s most dramatic rivers nobody has yet described it in historical and geographical terms, from high Tibet to the Arabian Sea, from prehistory to post-Partition. This is what I have tried to do here.

Monte Porzio
February 1973
The Indus in the mountains

International boundaries
Other boundaries
U.N. Cease-Fire Line
Mountain passes
On the high plateau of western Tibet lies a holy lake, Lake Manasarowar; this, the Tibetans believe, is the source of the Indus.

It is also traditionally the source of the other three great rivers of northern India. The four rivers are pictured as running out of it to the four points of the compass through the mouths of sacred animals: the Brahmaputra flows eastwards from the mouth of the Horse; the Karnali (a major tributary of the Ganges) south from the Peacock’s mouth; the Sutlej west from the Elephant’s mouth; and the Indus north from the Singi-Kabab, the Lion’s mouth.

The valley of the lakes – for there is a devil’s lake as well as a holy lake – lies at over 15,000 feet in an amphitheatre of mountains rising, ridge above ridge, to the snowy crests of the Great Himalayan Range to the south and the Kailas Range to the north. Separated from the main chain of the Kailas Range, and nearer the lakes, one isolated peak towers 22,000 feet into the sky, Mount Kailas itself, a pyramid scored across with dark purple precipices between snow-holding ledges and slopes, its cone white with everlasting ice and snow.

In summer, in fine weather, the lakes are blue as turquoise and the low cliffs and stretches of rock that surround them are as many-coloured as broken mosaics; the steep flanks of Mount Kailas shimmer with water, and powdered snow blows from its high summit like smoke. Farther away and even higher the Himalayas, majestic and serene, gleam like pearls in the sunlight. Then the valley is ‘certainly one of the loveliest spots on earth’. In autumn the lakes freeze. Rakas, the devil’s lake, covers itself with ice so smooth and clear that the reeds and fishes below can be seen as through a window. Lake Manasarowar, which has hot springs in its bed, freezes only briefly and into broken and fissured ice; every now and then, in deep growling eruptions, it hurls huge blocks of ice out onto its shores. At
every time of the year storms can blow up suddenly and great winds howling down from the thunderclouds blind travellers with sand in summer and snow in winter. In all its various manifestations this is a place where men are dazzled, bewildered and awed.

Millions of human beings believe that this is not only the birthplace of the Indus and other great rivers. It is where the gods themselves live. For the Tibetans who still believe, or partly believe, in their ancient animistic religion, Mount Kailas is the Precious Ice Mountain, the centre of the universe, peopled with thousands of gods and spirits of nature that can actually be seen by the truly pious. The most strongly marked black horizontal ring round its base shows, to this day, the scar of the rope by which the devils from Lake Rakas once tried to pull down the sacred mountain. For the Hindus it is the earthly paradise of Siva, Destroyer and Saviour, and must never be climbed by man. Tibetan Buddhists believe that Buddha himself dwells on the mountain top with five hundred of his redeemer-saints. At every point on the trails where a man first comes in sight of Mount Kailas cairns of rocks have been assembled over the years by reverent travellers, topped with poles carrying prayer-flags. Monasteries, shrines, temples and hermits’ huts girdle the mountain and Lake Manasarowar. Huge upright stones, positioned in lines and circles, bear witness to the ceremonies of the old religions. Ancient gods dwell in a castle on the bed of the lake. Sometimes, say the Hindus, Siva, his consort and attendant gods swim on the lake in the form of swans.

To reach this place pilgrims, Hindu and Buddhist, struggle from all directions for hundreds of miles across pitiless country. Some carry the ashes of their relations to scatter in the lake, all bring jars in which to take home a little holy water. They walk round Mount Kailas, and holy Lake Manasarowar, from east to west as the sun goes, praying at the shrines along the well-worn paths. The pilgrim road round the mountain is twenty-five miles long, the trail round the lake is more than twice as much. For people used to the dense air of sea-level, such as the Hindus following the Ganges upstream, every breath, at this height, is drawn thinly and painfully. Monks and pilgrims seeking special merit make their circuits prostrate, lying full length on the ground, praying, scratching a mark at arms’ length, rising, praying again, moving forward to the mark and lying down once more. By this method the journey round Mount
Kailas takes three weeks; the rocks are so rough that many of the devout wear a sort of wooden glove, like a clog, to protect their hands. One hundred and eight circuits of Mount Kailas ensure eternal bliss, and a bathe in Lake Manasarowar earns forgiveness for all sins, future as well as past. Credit for a pilgrimage to Kailas can be gained by proxy and rich men will sometimes pay servants or beggars to make the long pilgrimage for them and walk round the mountain and the holy lake. Stand-ins will go only so far, however, and bathing in Lake Manasarowar, which is bitterly cold at most seasons and dangerously foreshored with bogs, is not to be bought; a man will do this for himself.

The first Europeans to see this holy place were themselves religious, Portuguese Catholic missionaries who journeyed up from India to Tibet in the seventeenth and eighteenth centuries to convert Buddhists to Christianity. From Kashmir they crossed the Himalayas at passes of nearly 12,000 feet and then struggled up the Indus and its tributary valleys to Lake Mansarowar which, they reported, was believed to be the source of both the Ganges and the Indus. They saw many pilgrims near the lake, and this evidence of the strength of the native religious may have depressed them; at all events they took a glum view of the country. Mount Kailas, wrote one of them, is ‘a mountain of excessive height and great circumference, always enveloped in cloud, covered with snow and ice, and most horrible, barren, steep and bitterly cold’.

They headed on north to Lhasa, and the various ancient gods of Mount Kailas and Lake Manasarowar were left undisturbed by westerners for many years.

It was an English veterinary surgeon, William Moorcroft, a man more interested in this world than the next, who first gave details of the holy lake to the western world. Just how Moorcroft managed to get there is something of a mystery. His British employers in Bengal, the East India Company, had reluctantly given him permission to explore north and west into the mountains, but he used a disguise of flowing robes, beard and turban in Tibet — at least at first — so presumably he had no official Tibetan permits. At all events, and although his ‘disguise’ seems to have been penetrated fairly soon, Moorcroft’s caravan of porters and pack-animals reached Lake Manasarowar in 1811 without interference, and for the first time the legendary source of the Indus came under a clear and scientific eye. He walked round part of the perimeter. The lake, he reported, has ‘a noble
appearance', its pebbled shores and sandy beaches strewn with great blocks of red and green granite that had fallen from the 300-foot-high cliffs. It was a windy place and the winds constantly shifted and fluctuated. The water was 'well-tasted'.

There were eagles, grey geese and several kinds of gulls. Clouds of black gnats bothered him during the day but when the wind dropped in the evening they flew out over the lake and were snapped up by the innumerable lake trout.

Whatever else Lake Manasarowar offered for Moorcroft's interested inspection it was not, he was certain, the source of the Indus, nor of any other river. Many steep streams spilled into the lake but no rivers at all flowed out of it, so far as he could see. The holy lake, ringed by beautiful and awe-inspiring mountains, was not the inexhaustible fount of great rivers that legend maintained it to be.
Even before Moorcroft reported on his visit to Lake Manasarowar, European geographers had begun to question the Tibetan tradition that it was the source of the four rivers. Such a pattern was altogether too neat for a part of the world's surface in which nature, from the few accounts available, had taken a particularly confused and violent turn. Nobody but geographers cared very much whether it was right or wrong. The Mogul Emperors who ruled India from the sixteenth century saw Tibet as a far-away border problem. The European merchants setting up their trading posts round the coast a hundred years later knew that India itself was a treasure-house, but thought the mountain-locked countries to the north unpromising in terms of loot or profits and better left alone. The high Indus was not, it seemed, of any importance to anyone who lived outside its mountain basin.

After Moorcroft, later in the nineteenth century, a few Europeans reached the Kailas region—sportsmen, explorers and surveyors. One British visitor took a boat out on Lake Manasarowar, an episode long remembered locally, as the Tibetan official in charge of the district disappeared soon afterwards and it was later whispered that he had been decapitated for permitting such a sacrilege. Another, the grandson of Walter Savage Landor, the British writer, recklessly set his sights on Lhasa: 'Tibet was a forbidden land. That is why I went there.' Unfortunately for him the Tibetans were suffering from one of their recurrent passions of xenophobia, and he was captured by Tibetan soldiers near Lake Manasarowar and horribly tortured before the British authorities could arrange for his release. Serious surveyors included the StrACHEYS, W.H. Johnson, A.Cunningham and the German Schlagintweit brothers; their area of operations covered part of western Tibet but none of them showed any special interest in the Indus. By the end of the century, although it is not clear exactly when or by whom, the sources of the
Sutlej (the Elephant River) and the Ganges–Karnali (the Peacock River) had been established to the satisfaction of western geographers: the Sutlej flowed out of the devil's lake, Rakas, which was found to be connected to Lake Manasarowar by a stream that sometimes flowed underground or failed altogether; the Ganges–Karnali rose some fifteen miles to the south-west of Lake Rakas.

The Horse and the Lion Rivers (the Brahmaputra and the Indus) still kept the secret of their precise beginnings. Geographers knew their approximate positions. Moorcroft had had a fairly accurate idea of where the Indus rises: from the Kailas Range, he said, and north of Mount Kailas itself. An 1868 map of projected railways in northern India, which reveals the cheerful confidence of the early engineers and their ignorance of the detailed difficulty of the terrain, also shows the Indus rising in the Kailas Range. But even at the end of the nineteenth century no European had yet seen the source of the river. In a wide confused area of plateaux, peaks and valleys, much was still a matter of guesswork.

The man who determined to find the source of both the Brahmaputra and the Indus was Sven Hedin, the great Swedish explorer. He had already discovered the headwaters of the Brahmaputra some sixty miles to the east when, looking now for the Singi-Kabab, the Mouth of the Lion, he reached Lake Manasarowar in the summer of 1907. He knew, of course, of Moorcroft's visit nearly a hundred years before, but the lake still seemed the best place to start, if only to confirm a negative. His party consisted of one European companion, over thirty porters and servants, eighty-eight horses, thirty-six mules, ten yaks and a flock of sheep, one of which was to be slaughtered for supper each evening. His voluminous baggage included an aluminium chest of medicines, a quantity of equipment for surveying, sketching and writing, and a small collapsible canvas boat (made in London) with a short mast and loose-footed lugsail. Remembering perhaps the fate of the first Tibetan who had allowed a foreigner to sail on the holy lake, Hedin's guides did their best to dissuade him from using the boat. The surface of Lake Manasarowar, they warned him, was dome-shaped to accommodate a sacred tree, hung with a thousand monk's cells, which grew up from the golden sand in the middle of the lake and sheltered the lake god's castle. If the boat was lucky enough to struggle up one side, the god would be furious
and would cause it to slide down the other and capsize and everyone would be drowned. When this argument failed and Hedin set sail, monks from the nearby monasteries sent out mounted patrols to catch him. This tactic failed too. Hedin would sail for a point on shore until they came galloping to meet him, and then tack sharply away to the other side of the lake. After some days of futile effort they gave up and left Hedin to pursue his researches in peace.

For days and nights he sailed all over the lake, which he described as roughly circular and about fifteen miles in diameter—a sizeable body of water, in fact. The winds were unpredictable and treacherous and his boat very flimsy. Once he was caught in a violent storm and had to run before it; near the beach the surf was so heavy that he thought he would capsize but some monks came running to drag the boat ashore. They must have forgiven him, after all, for they told him they had started to pray for him as soon as they saw he was in danger. At night the wind usually dropped and in the calm moonlight the mountains, wrote Hedin, looked like ghosts and the world 'a mysterious fairyland'. His delight in the spectacle did not distract him from his purpose. 'Every twenty minutes I measured the depth and took the temperature on the bottom and on the surface and of the atmosphere.' He took soundings all over the lake and found it saucer-shaped with a maximum depth in the centre of nearly 250 feet. He examined almost every inch of its borders. The channel between Lake Manasarowar and Lake Rakas was narrow and dry when he was there. There were no other outlets from Lake Manasarowar.

In the late summer Hedin packed his baggage and canvas boat and prepared to move off. Probably from Moorcroft's reports or those of other travellers, though he acknowledges no debt, he had come to the conclusion that the real source of the Indus lay to the north of the lake. But his permits for travel in Tibet were limited to specific areas which did not include the region he now wanted to visit. The party was expected to go directly north-west from the lake and down the valley of the Gartang River, the first great tributary of the Indus, to Gartok, the provincial capital; beyond that, as soon as possible (so hoped the Tibetan bureaucrats), out of Tibet. It would have taken more than a matter of permits to stop Hedin from finding the source of the Indus now that he was so near. He explained his wishes and intentions. The local administrator, alarmed, warned him that if
he went off the agreed route Gartok would have to be informed at once, and the results might be very serious for all concerned. Hedin sat by the lake and waited. After several days the Tibetan official, probably anxious above all things to get the foreigner out of his own district, said weakly that he himself would make no difficulties if Hedin made a detour to the north, so long as his main caravan continued on its agreed way; it must be understood, however, that this detour was entirely at Hedin's own risk. Such grudging permission was quite enough. With five porters, a small tent and a trunk of essential equipment and clothing, unable to find a guide and briefed only by a local ancient, Hedin set off north, delighted with his luck.

He skirted Mount Kailas and then crossed the main Kailas Range. On the far side were grasslands and the valley was scattered with the black tents of nomad shepherds and their flocks of goats and sheep. His luck held, for the shepherds, they told him, knew the Singi-Kabab very well, and one of them agreed to take Hedin to it.

They followed 'an insignificant' stream up a rocky valley between steep cliffs. The stream was full of fish 'so crowded in a quiet pool that they made the water seem almost black with their dark backs'. (Hedin later wrote up this journey several times. In one version he and his companions built a dam to catch the fish and greatly relished the change of diet from their usual hard, dried mutton, but in another he left the fish undisturbed, in deference to the Buddhist antipathy to taking life. The first version is more convincing.) The stream became 'a tiny brook'. They climbed up a slope 'bestrewn with rubbish' and came at last, at nearly 17,000 feet, to 'a level, open valley'. A slab of white rock projected from the hillside. Below the rock 'several small springs' welled out of the ground into 'weedy ponds' (easy to miss, wrote Hedin rather smugly). Small votive pyramids of clay and cairns of stone stood about and there were inscriptions on the rocks. It was another holy place. Hedin had no doubt about what he had found. 'Not without pride', he wrote, 'but still with a feeling of humble thankfulness, I stood there, conscious that I was the first white man who had ever penetrated to the sources of the Indus and Brahmaputra'; and again, and one can almost see him striking a pose: 'Here I stood and saw the Indus emerge from the lap of the earth.'

Whether Hedin had really found the source of the Indus is arguable. From different directions a number of small streams
converge to form the headwaters of the Indus: which of them is the real headstream? The one accepted as such by the local people? Or the longest? Or the biggest in volume of water? In identifying and claiming the discovery of the source of the Brahmaputra, Hedin had ignored local tradition; with the Indus it suited him to accept it. The point is perhaps not very important in itself, since the Lion River has many 'mouths', but Hedin's attitude reveals a good deal about his own character.

He had to be first. He had to be the first to accomplish particular journeys and discover particular geographical features; and what he discovered had itself to be in some way pre-eminent. The deserts that Hedin crossed were sandier and drier than anybody else's deserts, his mountain passes were always dramatically precipitous and snow-choked, and the streams that he found had to be the start of great rivers. He was ungenerous about other explorers, always afraid that he might be 'obliged to give up a good deal of the conquest which I desired to save for myself only', critical of their achievements and cantankerous if challenged himself. 'My geographical morals,' he wrote, 'are quite different to my ordinary morals and if I can possibly make any geographical discoveries — I go on.' His naturally imperious temperament and attitudes had been reinforced by his student days in Berlin in the 1880s, a time when Germany was supremely successful and self-confident. Young men tend to fall in love with their first foreign country and Hedin did so irrevocably. For him, a Swede, Germany could do no wrong, and he later lost many friends on the Allied side and in his own country when, in the First World War, he openly supported the Kaiser and, in the Second, Hitler. His life was dominated by two things, an ambition and a fear. The ambition was to be an explorer and make great discoveries, the fear was of Russia. As to the latter, Hedin insisted to his friends after the Second World War that, after all, he had been right: Russia had now become the most powerful nation in Europe. As to the former he succeeded brilliantly, and in spite of being half blind from his late twenties. Francis Younghusband, a contemporary, who was to become an equally famous explorer, met Hedin in Central Asia in 1890 and afterwards wrote that he had 'impressed me as being of the true stamp for exploration — physically robust, genial, even-tempered, cool and persevering'. A colleague wrote of his 'enthusiasm . . . strength of will, indomitable patience'. Until Hedin was almost seventy, he crisscrossed the deserts and mountains of Central
Asia, nearly always unauthorised and disguised, often the only European in his party. His greatest achievement was to map vast areas of unexplored country in Tibet and eastern Turkestan. His camels and ponies and horses died on him, and his porters; he endured incredible hardships of heat and cold and survived drought, avalanches, brigands and tempests; but 'I go on'. He wrote at great length of his journeys, making them even more dramatic and important, if possible, than they were, but the fusion of his prose is relieved by his own sketches, in pen and ink or watercolours, of people and landscapes, lively and evocative and sharp as the outlines of the high mountains that he loved.

In his photographs Hedin looks more like a monk or a soldier than an explorer. He had a neat, well-shaped head, a long nose, firm lips and a slightly cleft chin. His expression is searching, serious and, unexpectedly, a little sad. This trace of sadness and the aggressive touchiness that he showed so often with other explorers seem to hint at some inner uncertainty or dissatisfaction. Perhaps his sense of purpose drove him too hard for his own happiness.

He would certainly be glad, though unsurprised, to know that today's maps of Tibet continue to record his name against the dotted lines of his trails through the mountains near the head springs of the Indus; unsurprised, because he knew only too well how difficult it was to get permission to go there and how dangerous with or without permission. Since 1907 when Hedin saw the 'weedy ponds' of the Indus's beginning, only a few westerners have succeeded in reaching Mount Kailas and Lake Mansarowar; nobody seems to have crossed the Kailus Range and traced the Indus headstream upwards. Hedin was not only the first 'white man' to find the Mouth of the Lion: he may well be the only one.

Although the Singi-Kabab is some thirty miles from Lake Manasarowar, the Tibetans generally, with their capacity for believing impossibilities and irreconcilables, continue to hold that the Indus flows from the lake. The lake is sacred and symbolic, and it would be fitting that the great river should start from it, so, in a symbolic way, it still does. In fact the ancient tradition had proved to be not so very far wrong after all. If none of the four rivers flow out of Lake Mansarawar itself, all of them rise within a short distance and run at first, roughly speaking, to the four points of the compass.
THE HIGH HEADWATERS

From its source the Indus runs 200 miles through broad stony valleys across the high plateau of western Tibet, bending west, north and west again so that its path on the map makes the shape of a sickle. The story of the first part of the river is therefore the story of western Tibet. For the western world it is a sketchy and incomplete story, partly because of the paucity and inaccessibility of records, partly because so few westerners have ever been there. The priests who ruled Tibet have always feared any exposure of their people to influences and ideas from the outside world, lest their own authority be weakened, and so far as possible have tried to isolate the country from the contamination of foreigners. If Tibet was not interested in foreigners, however, foreigners, both as neighbouring governments and as individuals, have always been interested in Tibet.

To the countries that border it, Tibet is important economically and strategically. Its resources have never been catalogued but are known to include gold, uranium, iron pyrites, salt and borax; there may be oil, and much else. In the west the Indus gives it valuable grazing lands and carves a way through the mountains for the important trails down into Kashmir. In spite of its forbidding mountains and its fierce climate, therefore, Tibet is sufficiently attractive to have invited repeated invasions in the last seven hundred years from China, Ladakh, Nepal and Central Asia.

If the priests could not stop military invasions, by and large they managed to make it very difficult for individual foreigners to wander about their country. Entry into Tibet was often absolutely prohibited and foreigners who were caught might – like Arnold Lander – be tortured or even executed. Occasionally, after long negotiations, the authorities allowed a foreign party to cross the frontier, but the limits within which it might move were carefully specified and local officials were warned to watch it closely. Tibet is so wild and so thinly populated, however,
that it cannot be effectively policed; even when the country was theoretically closed, a few determined foreigners somehow always managed to slip through the barriers.

The early Portuguese missionaries met no barrier but the country itself. This was bad enough. They thought it 'mountainous, sterile, and altogether horrible'. Good Catholics as they were, they refused to be deterred and for many years their Orders drove them over the mountains. Christian stories still figure in legend along the high Indus, but on the priestly Buddhism of Tibet Christianity itself made hardly any dent. Since the monks reached Tibet, a number of European explorers have followed the Indus route upstream and their descriptions added together and superimposed make a picture of a fascinating country, wild, beautiful, dangerous and altogether unique. After the latest Chinese invasions, Tibet has been more isolated, more closed to westerners than ever before. The way of life of the people and to some extent the look of the towns and villages must have changed. But nothing short of a terrestrial convulsion can change the country itself, and although it is peculiarly unstable in geological terms, those terms are so long as to be meaningless in the lives of men. In the known history of Tibet, from all accounts, the high Indus valley has not changed.

The landscapes are immense. The air is thin and sharp and the details of shapes and colours, even at long distances, show brilliantly clear. In the foreground a barren desolation of rock is mostly grey, patched occasionally with ochre, lemon, purple and dark red. A rare touch of green brightens the marshes by a freshet. Beyond the empty wilderness stand the great mountain ranges, jagged line above line, grey and brown and boney, crested all the year round with ice and snow. The east-to-west slope of the western Tibetan plateau, as high as Mont Blanc, is gentle and the Indus flows shallow there, clear blue except in summer spate when its water greys and thickens with the ice-melt. In winter the river freezes and the ground is blanketed with snow.

The biggest flakes were as big as the fleece of wool,
They came down flying like birds.
The small ones were the size of peas and mustard seeds,
They came down rolling and whirling.
The greatness of the snowfall was beyond all expression,
High up it covered the crest of the glacier ranges,
Low down it buried, up to their tops, the trees of the forest.
The black hills appeared to be whitewashed. The frost flattened the billowy lakes And the blue running streams were hidden under the ice. It is a silent place. At all seasons the winds keen across it for part of the day but paradoxically only emphasize the deep quiet of the plateau. The few living things are lost in the enormous spaces. Ravens dart round the crags, occasionally an eagle floats on the air. On the mountainsides hares, marmots and deer find sufficient grasses and shrubs up to the snow line and are preyed upon from above by wolves, lynx and the occasional snow leopard. In the broad valley of the Indus herds of wild asses run free; there are yaks and sheep and goats of such size and strength and spread of horn that their domesticated relations would not recognize them. The largest and most spectacularly antlered of the sheep, named after Marco Polo, is the summit of every Himalayan hunter’s ambition:

Do you know the world’s white roof-tree – do you know that windy rift Where the baffling mountain eddies chop and change?
Do you know the long day’s patience, belly-down on frozen drift, While the head of heads is feeding out of range?
It is there that I am going, where the boulders and the snow lie, With a trusty, nimble tracker that I know.
I have sworn an oath, to keep it on the horns of Ovis Poli, And the Red Gods call me out and I must go!

All the signs of human existence are minute in relation to their background. On the high Indus the Tibetans live for the gods, for trade, and for the care of sheep and goats. Apart from the monasteries, the structures they have built for these purposes are primitive and small.

The aboriginal religion of the Tibetans, an animism intensified by the grandeur of their country, the extremes of climate and the violence and suddenness of natural disasters, entailed the worship of thousands of gods and godlings. Spirits of rivers, mountains, springs and winds required continual propitiation with prayers and sacrifices to ensure safety and prosperity. ‘Bon’, a later development, became the official state religion, and in its elaborate ceremonies and rites a great many persons enjoyed authority and employment as priests. It was not until the seventh century, when the King of Tibet took two Buddhist wives and was converted by them, that Buddhism began to take root in Tibet, and monasteries were founded and granted the lands and tax exemption on which their future power and wealth
were to be based. Neither the aboriginal religion nor 'Bon' was eliminated. Buddhism gained ground only at the cost of incorporating many of the features of the earlier religions, and all three still exist together. Gods of earth and air and fertility are still worshipped near the monasteries, and beside the humble monks, scholars and genuine mystics, oracles and diviners, astrologers, exorcists, warlocks and demon-dancers still practise their ancient crafts. Religious beliefs and practices, observed William Moorcroft drily, seemed to be 'a strange mixture of metaphysics, mysticism, morality, fortune-telling, juggling and idolatry'.

If the kings of Tibet had welcomed Buddhism partly in the hope of freeing themselves from the domination of the 'Bon' priests they were disappointed, for the form of Buddhism evolved in Tibet, Lamaism, gives far more importance to the priests than does Buddhism elsewhere. 'Lama' means 'teacher' or 'master' or 'Superior One'. All power, temporal as well as spiritual, remained effectively in the hands of the priests. In the seventeenth century the most prominent of the Lamas was proclaimed to be the reincarnation of Chenrazi, the patron god of Tibet, and established as the Dalai Lama, the Living Buddha, the Precious King. Since then, at least until the recent Chinese invasions, the priests have governed Tibet unchallenged. They found this all the easier because the Tibetans are instinctively religious. Every palace, house, hut and tent has its altar and praying place. Beside the trails, even in the desert places but more thickly near the villages, there are pagoda-shaped chortens or shrines, that hold the ashes of the dead, prayer-wheels for the traveller to twirl, prayer-flags fluttering from high poles, and manis or long walls (which must always be passed to the walker's right) made of loose stones each carved with the prayer of the faithful 'Om Mani Padme Hum' which means, literally, 'O, Jewel in the lotus flower, Amen', or, more elaborately:

The dew is on the lotus. Rise, great Sun!
And lift my leaf and mix me with the wave.
Om Mani padme hum, the sunrise comes.
The dewdrop slips into the shining sea.

High above the villages, golden-roofed and painted in red, grey and ochre, great rambling monasteries as big as villages frown from their steep crags, unchanged in centuries.

But even the priests must now feel that some change is inevitable. Modern methods of transport have made Tibet no
longer as inaccessible as it once was and international tensions in Asia have given it an important role in great-power politics. If it is still silent and forbidden its isolation today is not necessarily of its own choosing. Since 1959, when the Dalai Lama fled from his capital and took refuge in India, there has been little reliable news out of Tibet. The indications are that the Chinese are introducing modern methods and technology on a large scale, improving agriculture and building roads and even airports. Up to the late 1940s the Tibetan authorities were still morbidly suspicious of even the simplest modern machinery, and some of the changes instigated by the Chinese will certainly lead to better material conditions of life. In spite of the long history of shared frontiers, wars and invasions between the two countries, however, the Chinese still apparently understand little of the country and people of Tibet. On his flight south to India the Dalai Lama saw that the Chinese driving in cars were wearing oxygen masks—presumably, he noted wryly, because they had read of the rarefied atmosphere of the high mountains. It seems that the resolution of the mountain people is to be broken, not harnessed, for the Chinese are adopting harsh methods in introducing their reforms to Tibet. They are also said to be sending colonists from China and encouraging mixed marriages. Their misunderstanding of the spiritual atmosphere of Tibet is all the sadder because once the two countries breathed the same air. In fact Buddhism reached China before it came to Tibet, carried from India in the first century after Christ by small bands of dedicated monks across the mountains of the Karakoram and Hindu Kush far to the west of Lake Manasarowar: ‘the most important transaction that has ever taken place between India and China so far’. Now the Chinese are deliberately and cleverly undermining Tibetan Buddhism. For a people that has always been oriented to the gods a break with them, if practical materialism wins, can only be traumatic.

It may very well not win. The Tibetans are among the most independent and self-reliant people in the world and progress enforced by bullying is unlikely to be well rooted. Moreover they have a special gaiety against which the portentous earnestness of communism may shatter itself. ‘Tibetans are a happy little people full of childish humour’ wrote an Austrian mountaineer, not long before the Chinese arrived. ‘They are grateful for any opportunity to laugh. . . They make mock of everything and everybody.’ A Chinese official visiting a Tibetan
village was pleased to find everyone in the road to greet him. In answer to his questions, Yes, they said, they were quite happy with the new regime – except for one thing. They didn’t like the new tax, the clapping tax. ‘Every time a Chinese comes here we all have to turn out and clap.’ Above all the facility the Tibetans have always shown in assimilating new and different ideas and changing them to their own pattern may stand them in good stead once again. God-fearing, tough, cheerful and adaptable as they are, it is hard to imagine that they will dismantle their million prayer-flags, abandon their ancient altars and take Chairman Mao’s precepts to their hearts instead of Buddha’s. ‘I felt,’ wrote the Dalai Lama in exile, ‘that whatever the Chinese did to us they would never destroy us completely.’ Tibetan children ‘simply would not swallow their materialistic creed’.

The Tibetans are no less practical in the things of this world than anybody else, however, and even under their own spiritual leaders trade always came second only to religion. Along the valleys of the upper Indus and its first tributaries run the great north-west caravan routes. Where the flanking mountains momentarily dip to a pass, other trails run northwards into the heart of Asia and south to India. Merchants ride the trails on small sturdy ponies, their goods packed on the backs of asses or yaks. There were practically no bridges on the high Indus (the Chinese have probably built some now) and animals and men crossed it by swimming or walking; in the strong current, with slippery rocks underfoot, this was a dangerous business and traders might have to wait weeks for the right moment. Yaks and ponies were usually strong swimmers, although sometimes it was necessary to drive the yaks into the water and pelt them with stones to keep them going, and the men often crossed under tow, hanging on to the animal’s tails. Goats were nervous and unreliable but sheep were unexpectedly cunning, using the current to traverse the river diagonally. Mules baulked and had to be dragged across by a rope round their ears. On both sides of the river traders travelled in company, and fast, eyes lifting for the clouds of dust that heralded a band of brigands, eyes straining for the village next ahead.

There are few villages inhabited year-round on the high plateau and they stand anything between five and twenty miles apart, collections of mudbrick huts in a small terracing of arable land on the banks of the Indus or its tributary streams. Most of them exist primarily for the traders’ caravans: they supply food
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and shelter to the merchants, fodder for the animals, a change of horses when needed. Sometimes the traders pay for their resting places in kind, sometimes in money; they always pay something because the roads must be kept open. The largest villages act as seasonal market places where Indian and Central Asian traders can meet to exchange and barter inside Tibet itself and so avoid the long journey to each other’s countries. Today the ancient trading patterns may have been partly disrupted, but centuries-old habits die hard and in any case they were based on the physical conditions of the country itself, the goods it produces and the goods it needs; and like the land these things cannot greatly change. From China and northern Tibet the traders bring silks, felts, tea, salt, furs, carpets and semi-precious stones such as turquoise and jade. From the south the Indian merchant arrives with spices, a variety of textiles, readymade clothes and cigarettes. From the west, from Ladakh and Baltistan, come dried apricots, nuts and butter. Western Tibet itself offers wool, the lightest and warmest wool in the world, of which the finest of all, the underfleece of the Tibetan goat, has for centuries been made into beautiful shawls and scarves by Kashmiri embroiderers. Near Lake Manasarowar are the best pastures in Tibet. Empty and desolate in winter under its blanket of snow, the valley of the high Indus comes to life in spring when the nomad shepherds, in their thousands, bring their flocks up for grazing.

They have spent the winter months down in the Indus valleys collecting and organizing their herds. Often the shepherds do not themselves own the animals but act as agents for a valley proprietor; after much chaffering over the smoky fires a bargain will be reached by which the shepherd either makes over a proportion of the products of the herd (wool, cheese, yak hair or butter) or guarantees a specified increase in the number of animals on their return in autumn. The second arrangement is the more chancy for the shepherd, since although he stands to gain if more than the agreed number of kids or lambs are born in the summer, he must pay for the difference if there are fewer.

As soon as the winds and frosts gentle down in the valleys, and the first green buds appear, the nomads assemble their families, pack their belongings, leave the village peasants, whom they despise in their hearts as tied to a monotonous routine of small sowings and smaller harvests, and set their faces to the mountains. In front of the party, straggling up along the rocky paths, the boys drive flocks of goats and sheep; behind them the
men prod asses and yaks heavily laden with tents and camping gear; behind them again, necklaced and earringed with silver and coral and turquoise, the women carry the cooking pots on their black braided heads and the smallest babies bundled in bright shawls round their shoulders. Everyone is loaded to the limit; even the girls carry packs of eighty pounds. At first, in the lower valleys, the paths follow narrow ledges along the cliff side, winding steeply up and down, a mountain wall on one hand and a precipice to the Indus on the other. Landslides and rock avalanches are an ever-present danger. Only when they have climbed up over the lip of the Tibetan plateau to the broad meadows near the source of the Indus can the nomads relax and spread themselves.

Usually they work in small groups of perhaps one or two families, in order not to over graze the pasture and be forced to make frequent moves. Even so their life is a round of making and breaking camp, unloading and putting up the heavy black yak-hair tents, watching the herds, packing and moving on again. Bands of brigands prey on the shepherds, as on the merchants, and each small group of nomads has its contingent of fierce dogs trained to attack strangers on sight. Even in summer it can be cold at this height, and both men and women wear long belted coats of fur or sheepskin with the fleece turned inside against their bare skins. If they are warm, they slip off the top half and a woman, cooking, will unselfconsciously continue her work stripped to the waist. They never change their clothes and wash, very rarely, in mixed bathing parties in the occasional hot springs. To the layers of natural dirt the women add the black-seeded yellow juice of the belladonna berry smeared over their faces as a protection against wind and sun. The staple food is tsampa or roast barley, as basic as rice or potatoes in other climates, and the nomads carry it up with them from the valleys in quantity. Milk, butter and cheese come from their own flocks. By bartering with passing merchants the shepherds obtain tea and make it, with soda and rancid butter, into a drink delectable to them (though most of the few Europeans who have tasted it found it unappetizing). Fresh meat is occasionally available, since even a strict Buddhist may fall to temptation if a hare or wild sheep wanders into his sights. The worst problem is fuel. There are no trees and only a few woody shrubs, and cooking has mostly to be done over fires of dried yak dung.

To a high degree, the economy of the nomad shepherds of the upper Indus is dependent on the yak; in such dependence on a
single animal perhaps only the Red Indian with his buffaloes offers a parallel. The hair of the yak makes the nomad’s tents and carpeting, its dung provides fuel and the rich milk of the cows produces butter for tea and oil for lamps. If a yak should die, accidentally of course, although the terrain is wild enough to account for many accidents, the meat is good to eat and the hides make excellent leather for saddles and bags and even small boats. The long tasselled tails are much prized as ornaments and offerings at shrines; Chinese ambassadors used to carry one to prove their bona fides, and Genghis Khan, Mongol Emperor of half the world, chose as his personal standard nine white yaks’ tails. Yaks are enormous beasts, so massive that they make an ordinary cow look like a dog, standing up to six feet at the head and sloping down to the rump; they have huge curving horns; their coat is so thick and matted that it looks as if it were solidly constructed of sections of armour plating, and a woolly fringe two feet long hangs down to the ground and sweeps their hooves. In many upper Indus villages a yak is kept at stud and mated with the village cows to strengthen the next generation and enrich the milk. Its combination of immense strength and stamina at great heights, of an instinctive knowledge of snow and mountain paths, and of surefootedness has made it admired, though not loved, by generations of mountaineers. Half-trained, as much as anyone can hope for apparently, it is invaluable as a pack animal, but its temper is short and capricious and it can be as obstinate as a mule. Wild, as Sven Hedin found, it is extremely dangerous. He fired seven bullets into a wild bull yak which then charged his party, horns down, and was actually gaining on his horse when Hedin’s eighth bullet finished it off: ten and a half feet long, he estimated, and about twenty years old. A British nineteenth-century surveyor compared a herd of yaks going fast down a mountainside over soft snow to ‘ships driving before a gale in a heavy sea, the snow flying in spray before them, as they tumbled through it breast-deep’. 9

Whatever the Chinese have done to Tibet, summer on the plateau must look today much as it has looked for thousands of years. The distant mountains, grey-blue and white, jut into the sky on every horizon. In the middle distance the first reaches of the Indus run blue and wide and shallow and the golden roofs of a monastery glitter on a crag above a few grey houses. In the foreground the bright grass is dotted with sheep, goats and round black tents; and winding along a stony path rides a caravan of
traders or, very occasionally, a small party of westerners bent on missionary work or exploration.

In 1944 the party would have been very small indeed, and hardly recognizable as westerners. Heinrich Harrer, an Austrian mountaineer, by now so sunburnt, bearded, dirty and ragged that he was almost indistinguishable from a local shepherd, was on his long and roundabout way back home from a German reconnaissance expedition to Mount Nanga Parbat. The expedition, as it turned out, had been ill-timed, for on the outbreak of the Second World War it was still in Karachi. Harrer and the others were promptly interned in India. He escaped three times from Indian internment camps and with some difficulty they re-caged him. The fourth time the cage was in Dehra Dun, a foolish place to choose because it was only fifty miles from the Himalayas and Harrer could almost smell the mountains. With a few companions variously disguised as members of a British and Indian working party, he marched out of the camp gates, saluted by the sentries. This time he managed to stay out. He headed north into the mountains as a homing pigeon makes for its loft. In Tibet he had difficulties at first with suspicious villagers and obstructive officials; he was even turned back briefly into India. But once beyond the frontier posts, well into Tibet and nearing the great plains of the upper Indus basin, he met only a few friendly nomads and some yak caravans carrying wool down to India who took no notice of him at all.

Harrer's descriptions of the valleys of the upper Indus and its first great tributary the Gartang are glowing. 'The scenery,' he wrote, 'was unforgettable. It was the colours which enchanted the eye ... Alongside the clear waters of the Indus were light yellow fields of borax, with the green shoots of spring time springing up near them ... In the background were the gleaming snow-peaks.' The high valleys 'had an original beauty. The wide plains were diversified by stretches of hilly country with low passes'. The mountains near Lake Manasarowar were 'indescribably beautiful'. This is a very different picture from the one drawn by the Portuguese missionaries; but then Harrer was a mountaineer, he had just successfully escaped into the mountains from prison, and it was spring.

Nearly forty years before Harrer followed the Indus upstream and into Tibet, Sven Hedin came down the river from the Singi-Kabab. He had rejoined the main body of his expedition and then ridden slowly north-west down the Indus. Before Tashigong,
almost the last village in Tibet, the rocky path was bordered with prayer-flags, manis and chortens. The village itself, a group of mudbrick houses on one side of the river, was dwarfed and dominated by an enormous monastery built irregularly on the top of an isolated rock in the middle of the Indus channel. Rocks, village and monastery were mainly grey and red; all round, the mountains stepped back to their white summits.

This was the place where Hedin’s Ladakhi porters, incensed at the difficulties and delays the Tibetans had previously imposed on their master, deliberately picked a quarrel with the Tibetans because – as Hedin recorded, evidently not at all displeased with them – it was their last opportunity for revenge. There was a great battle which lasted most of the night and involved practically the whole village. Presumably Hedin’s side won, though he does not say so explicitly. He seems to have watched the battle with interest but detachment, and gone to bed early. Certainly he did not allow his plans to be disrupted. They were ambitious plans: he intended to follow the Indus valley only for a short distance to a place where its containing mountains would open and offer him a pass into Central Asia, his next hunting-ground; and winter was already well on the way.

For the first day out of Tashigong, while his battered porters stumbled along the river bank, Hedin paddled down the Indus in his canvas boat conscientiously taking measurements. In places he found the river nearly ninety yards across, but its maximum depth was less than three feet. It was November by now, the nomads had already retreated to the lower valleys and at this height the Indus was beginning to freeze. Ice-floes drifted silently beside his boat in the wider reaches of the river and scraped along it in the shallows. He saw yaks, duck, wild sheep and a fox. On the bare banks of the river the rough stone shelters stood empty in the camping places, waiting for the nomads to come back with the spring. ‘The valley here,’ wrote Hedin, ‘presents a boundless perspective’ and he had an impression of ‘appalling distances’.
Tashigong, the scene of Hedin's porters' pitched battle, lies just below the confluence of the Indus and the Gartang. It was the Gartang that Hedin's main party had followed from Lake Mansarowar while he himself searched northwards for the source of the Indus. The two rivers are much the same size when they meet and indeed the Gartang has sometimes been taken for the main headstream, especially as it runs due north-west from the Mansarowar region, opening a direct road between Tibet and its western neighbours, while the Indus is forced to detour by the mountains among which it rises. Moreover, it is on the banks of the Gartang, at a crossing of trails, that the capital of western Tibet stands: Gartok, one of the highest towns in the world. Although this is (or was; the Chinese may have enlarged it) only the usual collection of mudbrick houses and tents, rather larger than most, it has for centuries been the most important wool market in thousands of square miles, as well as the administrative centre of the region, and the Viceroy for western Tibet journeyed regularly from Lhasa to Gartok in considerable pomp to transact official business with ceremonial exchanges of white silk scarves and a lavish consumption of butter tea.

Richer in trails and villages than the Indus, the Gartang is also decisive in direction, for it is its north-westerly line that the two rivers follow after their junction, out of Tibet and down through Ladakh (in India) and then Baltistan (in Pakistan). In Tibet the Indus runs across valleys not more than 10,000 feet or so below the distant mountains, but near the border of Ladakh the mountains begin to close in on it and its floor falls away; turning north at this point, Hedin had noticed that the river was beginning to drop sharply. The first battle between the river and the mountains starts here. Working at the base of the cliffs, digging into the rocks, feeling its way into the earth like a
mole, the Indus carves a deep gutter between the Himalayasthe south and the Karakoram to the north to the point where these stupendous mountain systems narrow together to meet the Hindu Kush and the Pamirs. In 350 miles it drops nearly 12,000 feet. From both sides innumerable tributaries pour down; twice, from the Karakoram, the Indus receives rightbank rivers almost as big as itself, the Shyok and the Shigar, and at the end of this stretch, at the point where it turns sharply south to round the Himalayas, another as large, the Gilgit River, foams down from the Hindu Kush. On a physical map the Indus, a narrow blue line joined by narrower blue threads, runs between purple walls liberally splashed with white. A geological map shows a kaleidoscope of colours and shapes representing the structure of the land and its development over the millennia.

For millions of years the whole area in the north of India was a sea. Fossils of marine animals and vegetation have been found both above and below fossils of land creatures, indicating that the land was raised above water level and has subsided again more than once. The presentday mountain chains began to be formed less than a hundred million years ago – a short time in geological terms – when, in a series of cataclysms, the Central Asian plateau thrust southwards towards the Indian subcontinent. A solid, deep-rooted mass of rock, perhaps the most ancient in the world, lies under India. Over hundreds of thousands of years the irresistible force from the north bore down upon this immovable obstacle. Gradually the land surface between them was pushed up and the Himalayas and the Karakoram reared into the sky. The sea drained away to east and west, leaving a river running across the north of India. The southward pressure continued and not much more than half a million years ago the Kailas Range was forced upwards, half way between the two tallest mountains in the world, Everest and K2, to block the lateral channel and create two separate river systems, the Ganges and the Brahmaputra running to south and east, the Indus and the Sutlej starting off to north and west. The sources of the Indus and the Ganges are now sixty miles apart and the two rivers run in opposite directions and into seas separated by the whole width of the Indian subcontinent, but in their lower reaches, going far to prove they were once connected, the same two curious marine animals, almost unknown to the rest of the world, are still to be found. Neither of them is attractive. The susu, biologically a sort of dolphin but with none of the dolphin’s charm, is eight to twelve
feet long and narrow-beaked: it feeds on small fishes and freshwater crabs on the river bottom and has become almost completely blind through the muddiness of the river water. The gharial, a particularly ugly type of crocodile, landing only to breed, has a set of vicious teeth and a long thin snout ending in a lump like a clenched first.

In Central Asia the earth's crust is still buckling and the mountains imprisoning the Indus are still slowly rising and edging southwards. 'Himalaya' means 'Abode of snow', 'Karakoram' means 'Black gravel'. This is a place of extraordinary contrasts. The clouds of the monsoon break against the southern flanks of the Himalayas and they are clothed high up in lush vegetation but in the Indus gutter to the north there is practically no precipitation, less than three inches a year. The mountains are barren, the few open spaces are mostly deserts. The air is parched and dusty and even the infrequent snow is not soft and feathery but granular, almost gritty. The surface rock is broken and fissured; mostly the skin of the earth is a pale powdery sand or a loose conglomerate in which rocks and stones are stuck in the clay like raisins in a cake. Still in the process of cutting down, the Indus and its tributaries have left a series of terraces along their crumbling or rocky walls to show the higher levels at which they once ran and their beds are a jumble of water-rounded boulders and stones that might have been deposited by ancient glaciers or rolled downstream in last summer's spate. The extreme differences of temperature between summer and winter and day and night weaken the grip of the surface soil and landslides and avalanches of mud and rock are frequent. High up in the ravines enormous glaciers, larger any than outside the polar regions, flow down in rivers of broken ice; sometimes one slides across a valley floor and blocks its river for months on end; when the waters finally break through they thunder down like a tidal wave, devastating everything in their path, sweeping away villages, crops and trees. The Shyok is especially dangerous: in its upper valley a narrow gorge is dominated by two huge glaciers which have dammed the river over and over again, forming a lake many miles long and hundreds of feet deep; after the bursting of the dam the valley downstream is littered with blocks of ice as large as houses that take years to melt.

Very occasionally the Indus's containing walls stand back and the river runs shallow, through islanded channels in a wide valley, but mostly they crowd it between high and precipitous
cliffs of red, grey and brown rock, carved by wind and ice into spires and pinnacles and sawtoothed ridges. 'Such a long series of stupendous gorges exists, I should imagine, in no other portion of the globe', wrote one British explorer. The scenery is 'gloomy but magnificent . . . Stupendous cliffs towered above us on one side of the narrow track, and fell beneath us to the raging torrent on the other side. There was no vegetation to be seen for a long distance.' Above its junction with the Shyok the Indus narrowed 'to one of the most awful gorges imaginable'. Another explorer wrote of the 'grim nudity and repulsive horror' of the great mountains, a third thought they had 'a sublimity too stern to bear for long'. A fourth found 'a monotony of grandeur about this Indus valley with its great mountainsides, all of one kind, its succession of precipices, its steep stone slopes and side gullies, its wilderness of broken and fallen rocks'. From the cliffs the traveller sees 'the booming river always sweeping along below in changeless dignity'. Depending on the season the river waters are clear blue or sea green, or 'a most peculiarly ugly drab colour'.

In winter the Indus valley, its harsh shapes blurred by a scattering of snow, can be beautiful and deceptively gentle to the eye. The river freezes over, but water still runs fast under the ice and the traveller treads it with caution. Snow avalanches boom down the narrow ravines and huge balls of snow, often enclosing chunks of rock, bounce over the precipices. In summer, when the high snows and glaciers begin to melt, the river roars through its gorges and the refraction of the sun's heat from the naked rock makes a daily inferno; even then it is cold out of the sun and many streams unfreeze for only a few hours in the day. It is said that a bareheaded man with his head in the sun and his feet in the shade can get heatstroke and frostbite simultaneously. At almost all seasons the wind blows strongly for part of the day along the line of the valley, stirring up maelstroms of sand. In the high uplands, the roof of the Indus gutter, the air is as clear and hard as a diamond in fine weather and a traveller can see for tremendous distances; perspective is lost as he trudges on for day after day with the same mountains in front of him clear and sharp, and almost unchanging. The occasional green oasis, created by the river and its tributaries, leaps to the eye, very distinct, looking as if 'it had actually been cut out by measurement from another country and dropped there'.

The walls of the Indus gutter are split, every ten miles or so,
The mountains by a ravine whose summer torrent pours into the valley a sloping fan of alluvial mud scoured out of the high mountains by the snow-melt. Beside these rich patches a tiny hamlet overlooks its steep, stepped fields where the peasants scatter soil painstakingly collected in baskets, to make up for the earth that is blown away in the dry winds, and toil endlessly to keep their narrow irrigation channels in repair. Cattle dung is used for fuel, human dung for manure. In spring poplars, willows, walnuts and little fields of watered barley shimmer green against the barren mountains; in the short intense summer the barley often ripens within two months of its sowing. In early summer there is a brief and brilliant flowering of aromatic shrubs, of clematis, vetches, irises and cornflowers, and of wild roses, palest pink to red, that bloom thickly enough to hide their own stems. Moorcroft noticed a particularly fine type of wild rhubarb. But for most of the year there is no vegetation in the Indus valley beyond the fields that the villagers have conjured around themselves above its banks.

Between the villages trails lead along the river, usually high above it, sometimes running down to its banks, sometimes detouring far away from it to avoid slopes impossible even for a goat.

On the so-called roads which penetrate these ravines one has to scale cliffsides by means of small wooden pegs let into the rock, or swarm up a tree-trunk leading from one narrow ledge to another twenty feet above it . . . a fall of hundreds of feet being the consequence of a false step . . . Every now and again, in order to circumvent some impassable precipice overhanging the river, the road abruptly ascends six thousand feet or so, to descend again as steeply on the farther side of the obstacle. For hundreds of years these ‘so-called roads’ have been part of the main inter-mountain route across the north of India from the Hindu Kush to the Brahmaputra and busy with traders and pilgrims. The villages function as staging-posts and markets for the caravans. In Ladakh the Buddhist Lamas were not slow to see the advantages that might be gained from this fact, and their monasteries along the Indus offered to the caravans protection at night and the produce of their own properties and of their hinterlands by day. Built, as in Tibet, like fortresses, they stand on the tops of almost inaccessible crags or on isolated rocks in the river bed continually making their power manifest to both villagers and visitors. In Baltistan, an even drier and poorer country, the
small Moslem villages also provide shelter and bazaars for traders. At frequent intervals transverse trails link the countries to north and south with the Indus road, and afford passage to traders from Central Asia and from the south.

The passes that these trails cross over the Karakoram and the Himalayas are few and dangerous and most of them are open only for a short time in the year. But in spite of the difficulties the passage of goods has never been stopped for long.

To the north, on the Karakoram side, the Indus is separated from Central Asia, according to an early English account, by 'such mountains that there is no passage for caravans; yet there cometh oft-times musk, with silke and other merchandize, this way by men; and goods are faine to be triced up and let downe often by engines and devices'. None of the passes is easy. Over the years the less hazardous have often been temporarily closed on account of wars and neighbourly enmities and the caravans have been forced to use more desperate routes. Moreover the number of practicable trails has been gradually reduced over the last 150 years by the encroachment of glaciers. The most important road north, the Karakoram Route, winds up from Ladakh over a ridge of mountains, descends precipitously to cross a bend of the Shyok, climbs again over another bridge, drops to a tributary of the Shyok, and struggles on and up into the heart of Central Asia; 'looking backward over the valley of the Indus, there is a magnificent view of the mountains south of Leh. They lie in a long straight line dotted with peaks . . . The snow-line is remarkably clear and well-defined, the effect resembling a filmy white frieze coupling a high purple wall and a ceiling of deep blue.' The views are splendid but the path itself taxes the traveller to the limit of his strength and nerve. There are eleven passes, most of them higher than Mont Blanc; the highest, the Karakoram Pass, the watershed between the Indian subcontinent and China, is nearly 19,000 feet. It can be crossed only in summer when for a few months the snow melts (an extraordinary phenomenon at this height, well above the permanent snow-level) to reveal a desert of black sand and gravel. Nothing grows along the Karakoram Route and the traveller must carry all the food he needs for himself and his beasts. Pack animals, overloaded with trading goods at the expense of fodder, have died on this pass in their millions. The caravans bury grain against their return journey; this is a recognised convention in the high mountains and the caches are hardly ever rifled, but if they cannot be found
the caravans are lost. They are often lost anyway. ‘Never once,’ wrote one traveller, ‘until we reached the plains were we out of sight of skeletons. The continuous lines of bones and bodies acted as a gruesome guide whenever we were uncertain of the route.’

Sven Hedin called the Karakoram Route a ‘via dolorosa’; no sentimentalist about ponies and mules he fancied he heard ‘the sighs of worn-out pack animals and their laboured breathing as they patiently go towards their end’.

There are other notches in the Karakoram, though not many and possibly not all discovered even yet. To the west the mountains dip to the Mustagh Pass, even steeper and less negotiable than the Karakoram Pass. To the east, above the headwaters of the Shyok, they dip again, and here the British once tried to set up another northerly route, using the Chang-Chenmo valley; they even organized rest houses and a messenger service. But hardly anyone ever used it. True, there were only four high passes on it, but the distance that had to be travelled at a stretch at high altitudes was much greater than on the Karakoram Route and to be so high for so long was even more exhausting than to go up and down. In any case caravans crossing lonely and desolate regions preferred to stick to the ways that were known and understood by their forbears. The Karakoram Route, therefore, remained the principal passage north from the upper Indus valley.

The southern and left-bank wall of the Indus, the Himalayas, stands further back from the river than the Karakoram and offers slightly more manageable passes at more frequent intervals. Opposite the Karakoram and Mustagh Passes are a number of saddles giving access to Kashmir and India. Of these the most important is the Zoji La. At 11,500 feet it is low by Himalayan standards and remains open for at least eight months of the year, but because it is on the rim of the monsoon area it can be ‘quite one of the most fickle and disobliging of them all’. On the southern side of the Himalayas the country changes dramatically. Coming over the Zoji La from the dryness and desolation of the Indus valley the traveller sees everything ‘changed in a moment’ to ‘one of the loveliest valleys in the world with glorious forests clothing every slope’, for Kashmir is monsoon-green and rhododendrons and huge pine trees grow up to the very fringe of the snow line.

It is a spectacular country, the Indus gutter, but harsh. The average height of Ladakh is over 10,000 feet; to adapt to the high, thin air the Ladakhis have developed an extra lung capacity
and at what almost everyone else would think to be a normal height they feel oppressed with heat and stifled. Living on the Indus means tending flocks, nursing small plots of maize and barley and bartering with passing merchants; brigandage is practicable only for the few and the young. Stories of great wealth hidden behind the mountains have long circulated in the West, probably originating with Herodotus who wrote of amazing ‘gold-digging ants’ on the upper Indus, but he must have got his information third-hand from the travellers’ tales of returning Persians and Greeks who themselves never saw this area. Sven Hedin believed his ‘ants’ were yellow-furred marmots popping in and out of their holes in the rocks. There is some gold here, and many signs along the valley of abandoned gold workings, but nobody ever got rich on it, and if other valuable minerals, such as oil and even uranium, lie under the mountains – likely enough, as they are known to exist in nearby Tibet – it would be almost impossible to get them out. Until technology can overcome the desperate facts of terrain and climate the Indus gutter must remain largely barren, producing barely enough to maintain its scanty population.

But if life is hard on the high Indus it is rarely dull, for the roads and trails that follow the valley bring a rich variety of people to the small towns and villages perched near the river.
Leh, capital of Ladakh, has for thousands of years been a focal point in the web of trade that stretches along the Indus and across the Himalayas and the Karakoram. In the nineteenth century it became also a base for the western explorer, the place from which he took off into the mountains and the place to which he returned, months later, sometimes 'so altered in appearance that my friends failed to recognize me'. Today it is a military cantonment backing a mountain frontline and it can take more time to obtain a permit to visit it than the explorers spent in actually crossing the Zoji La and reaching the place.

The town stands on the north bank of the Indus, at over 1,000 feet, nestling under scored and barren mountains at the head of an unusually wide alluvial fan that slopes down some four miles to the river. The Indus is broad here and divided by islands. To the south, across the open valley, Leh faces sharp ridges of rose-red rock backed by the snowy crests of the Himalayas, knife-edged in the clear air; at sunset the whole great bowl of mountains and foothills glows pink above the silver river. The houses in the town, mostly built of pale, sun-dried mudbrick, are varied by the carvings and bright paint of their wooden doorposts and window-frames and enclosed balconies; in late summer their flat roofs are piled with yellow hay sun-drying for the winter cattlefeed. High above, apparently growing out of the rocky cliffs, the white nine-storeyed palace of the ancient kings of Ladakh and the red and grey ramparts of a great monastery loom over the town.

Around Leh the land is cultivated just as far as it can be irrigated. Along the Indus bank grow apricots, mulberries, apple trees and walnuts; groves of willows are pollarded for osier baskets and plantations of poplars supply beams for houses and bridges. Innumerable tiny water-channels, led laboriously off the river, make a wide patchwork of terraced fields for barley and maize and such vegetables as carrots, peas, beans, cabbages and
tomatoes. Where the channels peter out the desert of naked rock and fine dusty sand that is Ladakh takes over once more.

Country like this, not only rugged at all seasons but subject to appalling storms, rockslides and floods from glacier-breaks, breeds fortitude into its people and humour too, since this is the best defence that humans can muster against the wrath of the gods. The Ladakhis are of Mongolian stock, short and sturdy, hardy and longlived, and every westerner who has known them has been impressed by their endurance and cheerfulness. One explorer wrote of his Ladakhi servant, his favourite of all the men who accompanied him on his various travels: ‘He was the most cheery, happy-go-lucky, easy-going man, who ever proved a good servant in spite of his carelessness. Always laughing, always chaffing with the pony-men or coolies, always losing something vitally necessary, but always ready to do the hardest and most dangerous piece of work when the crucial moment arrived.’ They are not handsome, however, at least to western eyes. Mrs Isabella Bishop, an English traveller, who went to Leh at the end of the nineteenth century, found the people not only dirty, for they washed only once a year, but physically very ugly: short, squat, flat-nosed and big-eared. She appreciated their independence, honesty and friendliness, however, and like everyone else who came to know them ended by liking them very much. Half a century after her visit an American geographer who went to Ladakh agreed with her: ‘The stony villages and ugly people have a peculiar charm.’

It is, indeed, a peculiar charm, odd and individual, a marvelous confusion of strange shapes and colours, of shortlived shoots and flowers springing from rainbow-tinted rocks, of bright, tattered prayer-flags streaming over clustered roofs, of large lumbering yaks and small laughing people with slitted eyes. Above their long, girdled woollen coats the men wear round or earflapped caps of fur and wool; the women’s head-dress – ‘pre-eminent in ugliness’, according to Mrs Bishop – consisted of great earpieces of fur attached to the peytrak, a broad band thickly studded with silver and turquoise and red coral running back over the forehead to the small of the back. (The hair itself, an earlier visitor remarked, had ‘much the appearance our own dames might have, if, after adjusting their chevalure they rubbed their heads for a considerable time in the coal-scuttle and then were dragged through a furze-bush’. The peytrak may not be beautiful but it is valuable. When a girl is born her parents
at once begin to collect the stones for her _peyrak_; eventually it constitutes her dowry. The silver and turquoise probably come from China, but the coral was brought here a long time ago and all the way from the Mediterranean. More than nineteen centuries ago Pliny of Rome wrote: ‘In the same degree that people in our part of the world set a value upon the pearls of India, do the people of India prize the red coral’, and in ancient times Greeks, Romans and Persians trading to the east carried coral to barter for the jewels of Asia. One of the first Portuguese expeditions to reach southern India, at the end of the fifteenth century, brought back a letter from the local Indian ruler to the king of Portugal assuring him of an abundance of spices and asking in return, among other things, for coral. From India coral gradually found its way north across the mountains and much later Marco Polo reported that it was highly esteemed in Tibet, for decorating the necks of idols and women.

In the far-inland of the upper Indus the sea-born coral is the subject of many legends. On the tops of mountains grow trees whose fruits are beads of red coral. A man once climbed one of these peaks, found the coral tree and greedily picked all the beads. His pockets full, he started down the mountain. To his horror thousands of snakes suddenly appeared, wriggling towards him from all directions. He took to his heels, throwing away his coral beads as he ran, greatly relieved when the snakes, each picking up a bead in its mouth, turned back up to the tree. He arrived at his house exhausted and slept all night. Next morning when he opened his door he found a large snake lying just outside. He hastily slammed the door and sat down, trembling, to think what to do. After a time, he came to the conclusion that he must somehow have kept one coral bead. He searched his pockets but could find nothing. He took off his voluminous garments and shook them, and at last a bead fell out of the folds. Round a crack of the door he threw it out to the snake which immediately took it in its mouth and disappeared up the mountain.

Like western Tibet, to which it has been linked by the Indus for so long in trade and religion that it is often called ‘Little Tibet’, Ladakh is a poor country in terms of agriculture. Less than twenty per cent of the country was cultivable, Moorcroft thought; he may have been over-optimistic. Rather unexpectedly, for its basic precept is detachment from this world, Buddhism has promoted what growth was possible in the mountain deserts. As much as a sixth of the population may live contemplative, materi-
ally unproductive lives in the monasteries, but the monasteries themselves have on the whole used their wealth and power for the benefit of the other five-sixths. They encouraged trade, and kept the trails open against bad weather and brigands, and lent money to the peasants on generous terms. Moreover polyandry, a practice almost exclusive to Buddhism (and very shocking to British explorers in the Victorian era, who sometimes equated it with the suffragette movement, and more recently to Indian military police who took it for organized prostitution), was common throughout Ladakh for centuries and carried an unsolicited economic bonus. The Imperial Gazetteer says roundly: 'There can be little doubt that the modest prosperity of the Ladakhis, in contrast to the universal poverty of Baltistan, is due to the practice of polyandry, which acts as a check on population.'

When the eldest brother married, his next two brothers would share his wife; other brothers would either have to enter a monastery or find an heiress, and then concentrate on keeping her happy since she could divorce them with a present (usually a sheep) at any time she wished. Polyandry is now outlawed in Ladakh and the population, once stable, is now increasing rapidly – one estimate is that it went up as much as sixteen per cent in the twenty years after polyandry was prohibited – and the country must be the worse off.

Over and above its own hard-won produce Ladakh depends on trade carried along the Indus and its transverse trails. Both the Karakoram Pass and the Zoji La, leading respectively north and south from the Indus, are near Leh and so for centuries, under the tall slim poplars that shimmer yellow in the autumn wind above the wide main street, narrow shops have spilt piles of furs and felts from Central Asia into the road, silks and brocades, and bricks of tea from China, Russian cloths, wool and copperwork from Tibet, textiles and trinkets from India and baskets of nuts and dried fruit from Baltistan. In the dark caves behind the shopfronts gold, silver and tinsel sparkle. Small ponies from Turkestan jog past the slow-moving, crescent-horned yaks. Fairskinned Yarkandis, shaggily furred Tibetans, Mongols with long drooping moustaches and neat Indians brush shoulders in the narrow unpaved roads, and in a Babel of languages somehow communicate with each other, while the people of Leh benignly survey the world that – to their profit – has come to their high mountain doorstep.

Now and again the heterogeneous crowds jostling in the
bazaar would pause to stare at a man dressed more or less like themselves, but taller and paler-skinned, outstanding even in a town where differences were to be expected. Another westerner had arrived.

In the nineteenth century an uneven trickle of Europeans struggled over the Himalayas and across the Indus to Leh. Here they would spend a week or so engaging porters, bargaining for yaks and ponies, and purchasing their last camping supplies of barley, tea and butter. Some assembled caravans of men and animals, some chose to travel light. One day they would march out, heading north into the Karakoram or south-east up the Indus to Tibet, or north-west, downriver, towards the Pamirs.

By all accounts, by their own accounts in fact, since few of them have been studied by objective biographers, the explorers who set out from Leh were extraordinarily disparate. Certainly they must all have felt the fascination of the wild country near the Indus, even if it was sometimes for some of them the fascination of horror, and all of them had an inexhaustible courage and endurance, so much of both, indeed, that they hardly bother to mention the hair-raising dangers of their journeys. But in their underlying motives for making the long struggle to Leh and beyond, they had little in common. Some went there to discover. Some were surveyors and others were spies. Some went for sport and adventure, and some even went for their health. Some looked to the mountains to give them fame, others looked for beauty. One or two looked for God.

William Moorcroft, the man who had already proved that Lake Manasarowar was not the source of the Indus, went to Leh for horses and trade. He had arrived in India in 1808, already in his forties and with a varied career behind him. As a young medical student at Liverpool he had been asked to help investigate a cattle epidemic, and done well. Friends advised him that ‘if I were to devote myself to the improvement of a degraded profession, closely connected with the interests of agriculture, I might render myself much more useful to the country, than by continuing in one already cultivated by men of the most splendid talents’. One of the men of splendid talents, the Scottish surgeon John Hunter, who was himself interested in veterinary science, confirmed this advice, and Moorcroft decided to follow it. There was then no veterinary college in England, so he studied in France and was the first Englishman to qualify in the subject. When he returned to England he built up a successful private practice,
became joint professor of the newly established Royal Veterinary College (now the Royal College of Veterinary Surgeons) and a distinguished man in his own field. This was not enough. The Industrial Revolution was just getting into its stride and Moorcroft was not to be left out. He invested a great deal of money in an enterprise for the mechanical construction of cast iron horseshoes. The project failed and he lost heavily. At this stage the Honourable East India Company offered him the job of superintendent of its stud farm in Bengal. Moorcroft could certainly have made plenty of money again in England; it must have been the attraction of change that made him accept the job in India.

The East India Company, founded in 1600 to trade with India and the East Indies, had built up a highly profitable commerce; gradually, and in large part through the necessity of combating French rivalry, it had acquired territory, built fortresses and recruited an army. By the time Moorcroft arrived in Bengal it was no longer a purely private trading company working for profit, for the British Government had itself taken over responsibility for political, financial and military affairs through a Board of Control. In effect the Company, under the Government, was the ruling administrative power in India.

In Bengal Moorcroft concentrated his energies at first on the reduction of disease among the company's study horses and the improvement of the stock. He surprised his superiors, and the English community in Calcutta, only in his preference for the tough and sturdy ponies of Central Asia as against the fashionable Arab horses. But Bengal was too small to contain his energies for long and by 1811 he had persuaded the British authorities in Calcutta to send him to Tibet and westward to the neighbouring country of Ladakh to buy horses; he was also expected to report on the possibilities of trade, and in general, to find out everything about the whole area. It was then utterly unknown.

He made two journeys into Ladakh, but unfortunately many of his notes and sketches were lost, and many of those that have survived are confusing on topographical detail. He was not a geographer. About animals and crops, however, he is precise to the point of pedantry: 'The bite of the yak is quicker and nearer the ground than any other species of neat cattle I am acquainted with, a peculiarity which fits them for the short and scanty herbage of an Alpine country.' Wheat in Ladakh, he reported, has 'a peculiar structure of the ear, which may be described as formed of two sides and two pillars. The sides are nearly flat,
and the stem of the supporting straw runs perpendicularly between two pillars of grain', and so on, for a very long paragraph. He suffered a good deal in his journeys and recorded his symptoms with the precise but detached interest he gave to yaks and wheat. On the high passes he had a sense of suffocation, he found himself sighing, 'very frequent and distressing'; he had difficulty in breathing and a 'great oppression about the heart'. There is never a hint of self-pity: he was doing what he liked and was unconcerned by temporary discomforts.

On his second journey to Leh in 1820 Moorcroft took quantities of goods for immediate sale and a variety of samples to promote further trade. The local authorities quickly agreed to allow British merchants to operate in Ladakh and also to pass through the country to Chinese Turkistan. Visions of a splendidly expanded Leh bazaar, through which the new industrial products of England streamed north across the Karakoram, filled his mind. Communications with the authorities in Calcutta and Central Asia were slow; it was a year before he realized that the Chinese were deliberately delaying the necessary follow-up agreement, and the East India Company had no wish to pursue his understanding with the Ladakhis. In the end nothing came of his efforts. It was not until 1867 that the British authorities in India stationed an Agent in Leh and, as Moorcroft had anticipated, trade then expanded enormously - at least temporarily.

About the same time as Moorcroft was there, one of the most unexpected of all the odd and varied reasons for taking the Indus road brought a Hungarian called Csoma de Koros to Leh. He was in search of the ancient roots of the Maygar people, and having made investigations in Turkey and Persia he was now on his way to Tibet, financed largely by British patrons. Although he failed in his main objective there, he was extraordinarily successful in gaining the confidence and friendship of the Tibetans; he lived in a Lama monastery, produced the first Tibetan–English dictionary and even translated a number of Church of England psalms into Tibetan (one wonders what the Lamas made of them).

After Moorcroft and Csoma de Koros another silence from the western world fell on the upper Indus. In the 1840s and 1850s the East India Company sent - or allowed - a few geographers and surveyors to explore north of the Himalayas; most of them passed through Leh at one time or another, but their reports were often confidential, always technical and mostly dull for the layman. When the Company's responsibilities and interest
were wholly taken over by the British Government in the middle of the nineteenth century entry to Ladakh was at first even more difficult than before, and it was not until the 1880s that a few soldiers and reliable civilians were officially permitted to make expeditions north of the Himalayas and into the Indus valley. Of these the first and perhaps the best known is Francis Younghusband.

He had roots in India: he was born near Rawalpindi and his uncle, Robert Shaw, was a famous explorer in Central Asia and the second agent to be appointed in Leh. In 1884, with Sandhurst and two years of army service behind him, aged twenty-one, Younghusband was already persuading his senior officers to give him leave from his regiment to travel in the Himalayas. His reaction to the mountains was intense: 'As I stepped out on my first day’s march in the Himalayas, a strange exhilaration thrilled me. I kept squeezing my fists together and saying emphatically to myself and to the universe at large: “Oh yes! Oh yes! This really is splendid! How splendid! How splendid!”' A little later he caught sight suddenly and unexpectedly of a beautiful peak and 'my whok being seemed to have come to a standstill, and then go rushing out in a kind of joyous wonder'.

His 'joyous wonder' in nature deepened into a passionate concern with God, for the mountains had given him a mystical experience. From then on, whatever his official duties — investigating rumours of Russian infiltration in the Pamirs, serving on the North-West Frontier, leading a British expedition to Lhasa, Cambridge lecturer, Resident in Kashmir, President of the Royal Geographical Society — his devotion to nature, to beauty and to God grew steadily. He told the Royal Geographical Society: 'Those who come and tell us of some beauty they have discovered in a natural feature would be as welcome here as one who has discovered a new river. Wordsworth ought certainly to have had the Gold Medal of this Society and Shelley and Byron, too, if they had lived till it was founded.' He was invariably calm and courteous and invariably reserved. 'He was the most silent man I have ever met', wrote another British official of Younghusband, 'a habit doubtless conduced by his historic travels through the most silent regions of the world. It was a habit which added much to his prestige in the oriental atmosphere of the Indian States. They said “he is very wise, he is always thinking” and as they never knew what he was thinking about, many a guilty conscience was perturbed and restrained.' In his own
estimation Younghusband's highest achievement was the founding of the World Congress of Faiths, an organization dedicated to the belief that all religions have a common and mystical root, and he put his heart into such books as *Life in the Stars*, *The Living Universe* and *Modern Mystics*.

Not long after Younghusband Mrs Isabella Bishop turned up in Leh travelling privately for her own interest and pleasure. She was the daughter of Mr Bird, a parson, and for the first forty years of her life, apart from one visit to Canada and the United States, she had led the conventional life one would expect of a Victorian lady, interesting herself in good works, teaching in Sunday school, studying history, literature, drawing and botany. She was constantly troubled with backaches and at one period was forced to spend half of every day in bed. An operation did little good, she suffered from insomnia and acute depression and eventually the doctors could only suggest that travel might help her.

It did; so much so, indeed, that she seemed to become a different person, full of vitality, interested in everything, brave and tireless. For her travel did not mean the well-worn tracks that most people took: it meant the wild places of the earth, the wilder the better. At the age of forty-one she set off for the Sandwich Islands (now Hawaii) and in the next seven years she travelled in the Rocky Mountains, Japan and Malaya, always the hard way, often the only European in a party and always the only woman. On the death of her sister, whom she loved and to whom she faithfully returned between voyages, she married an Edinburgh physician, Dr Bishop, who had proposed to her several times. He was devoted to her, but not blindly so; he understood her passion for travel though he could not share it. 'I have only one formidable rival in Isabella's heart, and that is the high tableland of Central Asia,' he said.13 The marriage was happy, though neither husband nor wife seems to have enjoyed good health, but sadly short, for Dr Bishop contracted pernicious anaemia— the last of many ailments— and died within five years. For a long time Mrs Bishop was distraught, and even on the edge of total collapse.

Once more the solution was travel. Now fifty-eight, she chose as her objective the country between China and north India and in 1889 she was crossing the Zoji La northwards with three servants, a colourfully dressed Pathan soldier as escort, a tent, a trestle bed, a cork mattress and a folding table and chair. The only stores the party carried, she reported, were tea, soup and
saccharin; sheep, flour, milk and barley were bought on the road.

Photographs of Mrs Bishop show a short, thickset body (she was just under five feet in height) and a face in which the large, heavy-lidded eyes gleam with intelligence and determination while the long mouth quirks with humour. She needed humour as well as courage in Ladakh. Almost as soon as she arrived in Leh her Pathan escort was recognized as a mutineer and murderer and driven out of town. The houses smelt abominably, the butter tea that good manners required her to accept was very nasty, her yak looked ferocious and, when she rode it, capered about alarmingly near the edge of cliffs, and in fording the Shyok River her pony fell on top of her and broke one of her ribs. Throughout she remained cool, cheerful, practical and, in a ladylike way, fully in command. 'I did not suffer from the climate,' she wrote, 'but in the case of most Europeans, the air passages become irritated, the skin cracks, and after a time the action of the heart is affected. The hair when released stands out from the head, leather shrivels and splits, horn combs break to pieces, food dries up.'

After Ladakh she was to visit Persia, Korea and China; two years before she died, at the age of seventy, she rode a thousand miles through Morocco. She was the first woman to become a Fellow of the Royal Geographical Society and nobody could say she had not earned the distinction.

Some near-contemporaries of Mrs Bishop made much heavier weather than she did about travelling in Ladakh. The Earl of Dunmore, travelling in style, was welcomed at every village along the way with horns, trumpets and drums, and ceremonial brass goblets of chang, a sour malt ale as strong as spirits. Captain Deasy, an officer of the 16th Queen's Lancers, wrote ponderously: 'I had long entertained the desire to travel in some unknown country. The vast area of the territory marked "unexplored" on the map of Tibet, then recently published, at once attracted me, and it was to this inhospitable and almost inaccessible land that I resolved to proceed.' To fit himself to his ambition he studied astronomy, surveying, biology, medicine and surgery. He then 'proceeded' from India over the mountains to the Indus valley with a brother officer, a junior surveyor, two orderlies, more than a hundred coolies, a number of sheep (mutton on the hoof, each sheep fulfilling a double purpose by carrying a twenty-pound sack of barley until it appeared on the supper table), sixty-six luggage and riding ponies and mules,
several yaks and a collapsible boat. The party must have looked more like an invading army than a private expedition; perhaps this is why the Tibetans left it alone. Deasy's book opens with a full-length photograph of himself. He is in local dress uniform, as it were, wearing a loose sleeveless shirt over a heavy silk ankle-length gown and thick felt turned-up boots. Of his face little can be seen between his round fur-trimmed cap and bushy beard but his eyes, piercing and fanatic, stare out directly and purposefully. Loaded with botanical and geological specimens and 'a small collection of mammals' (dead), he returned to Kashmir after six months, himself more dead than alive.

In 1891 E. F. Knight, a brave explorer by land and sea, precise, critical, self-assured and a Victorian to his fingertips, arrived in Ladakh on an official mission. The customs and administrative methods of human societies and the conflicts between societies were as endlessly fascinating to him as Nature and God to Younghusband: Ladakh and Baltistan thrilled him, because, just north of them 'on the high Roof of the World — what more fitting place! — the three greatest Empires of the Earth meet — Great Britain, Russia and China. He was an acute observer and recorded races, languages, heights, distances and details of merchandise, but he apparently felt only an amused contempt for the people themselves. A Ladakhi husband abused by his wife 'was a sad sight and set one thinking to what depths women's rights, as advanced by some extreme ladies at home, would drag down the hapless male'. The Buddhist prayer-wheels worked by the river waters, constantly revolving and so productive of more prayers in the twenty-four hours than wind-waiting flags or hand wheels, were still not really very efficient: 'An enormous amount of praying power is wasted in the rushing Indus, which, properly utilized, might be made to ensure Nirvana on earth to every soul in the country. Good missionaries from Lhasa should see to this.' Like most British officials of his time, Knight was wholly confident of the British role in India.

It is gratifying to observe in what extraordinary estimation the Englishman is held throughout these regions and how he is appealed to in every difficulty and his fiat is accepted without question. The natives have only seen English gentlemen and have acquired an absolute confidence in the integrity and justice of our race, a confidence which is seldom, if ever, abused; for happily the mean white does not extend his travels here. The Asiatics do not understand us, neither do they love us, but they respect Englishmen as being straight and brave.
His satisfaction with the British way of doing things sometimes blinked him. When his party had crossed the Indus and the Himalayas back to India one of the porters— they were all ‘savages’ to Knight— said he was hungry and another British officer bought him some unleavened pancakes at a wayside shop. The porter, astonished at seeing money change hands, asked if it was necessary to pay for food here. Yes, certainly, they said. He was amazed. ‘Supposing a man had no money in this country he might starve?’ On being assured that this was indeed quite possible, ‘he shook’, wrote Knight censoriously, ‘with uncontrollable laughter. It was the best joke he had ever heard. He then explained this ridiculous system to his companions, and they roared in chorus’.

Sometimes insensitive but always sharp-eyed, Knight recognized the country near Leh for something altogether exceptional— like the flying island of Laputa in Gulliver’s Travels, he wrote, ‘perspectiveless, artificial, unreal-looking’. The Indus valley was a wilderness of ‘burning sands and pebbly wastes’, the river itself was ‘swollen and discoloured with the melting snows of unexplored regions of Tibet, and roaring in a series of furious rapids between its desert shores’.

Martin Conway led a sizeable surveying party up the Indus to Leh soon after Knight was there. Conway was then thirty-six and although he had done a good deal of climbing in the Alps he was known chiefly for his books on art. It astonished the painter whom he took on the Karakoram expedition that Conway should here ‘almost suddenly blossom into a man of action and a born leader of men’. The role must have suited him, for in the six years after Conway left the Indus he crossed Spitzbergen, climbed several of the highest peaks in Latin America and explored Tierra del Fuego. His other life as art critic and historian was equally vigorous and successful; he became Slade Professor of Fine Arts at Cambridge, then Director-General of the Imperial War Museum. Over the years his main interest gradually centred on the ways in which human beings form communities and then express communal feelings, a sociological approach to the world as opposed to Knight’s political approach but one which, with a certain irony, led him into the centre of politics. For thirteen years— from 1918 to 1931— he sat in the House of Commons representing the combined English Universities. Like Younghusband he took no great pride in his mountaineering writings and he thought his best book was The Crowd in Peace
and War, which expressed his personal philosophy — romantic, beauty-loving, hopeful, inquiring and reverent. In the year before he died his last book was published, A Pilgrim’s Quest for the Divine. Almost a contemporary of Younghusband, Conway, of all the other Himalayan and Karakoram explorers, is the one most like him in his approach to mountains and man and God.

He was a companion ‘of the rarest quality’, and the party he led to Leh was an extraordinarily happy one. His second-in-command, C.G. Bruce, then a junior officer in a Gurkha regiment, was a large young man of overflowing physical courage and strength, Welsh in spite of his name, with all the wit and gaiety of his race. Conway’s expedition gave Bruce his first view of the great mountains that wall the Indus, and although, like the Portuguese missionaries, he often found them horrible, they so deeply challenged his energies that he could not leave them alone. Apart from his service in the First World War, in which (commanding another Gurkha regiment) he was wounded at Gallipoli, he spent most of his next forty years soldiering and climbing, on duty and off, near the Indus, indomitable, cheerful, enthusiastic and confident. Once he fell and injured his back and leg so badly that he was forced to lie on the ice surface of a glacier for ten whole days and nights; he was carrying nothing but light summer kit and his Gurkha orderly could keep his circulation going only by constant massage. He never grumbled; the bad times were almost as enjoyable, to Bruce, as the good ones. On many expeditions his wife accompanied him, a kindred spirit, adventurous and practical. To one of his books she added an appendix for the benefit of women mountaineers. Boots were of course essential, but there is no need for the average woman pedestrian to wear bloomers or even extravagantly short skirts. A neatly cut skirt which clears the ankles (stockingette knickers replacing petticoats) is perfectly comfortable. In case climbing of any sort is contemplated, buttons and loops to pick up the skirt front and back, for going up and down hills, is an advantage.

At the age of fifty-two, by then a General, Bruce became ill and was retired from the army with Medical Board advice to ‘go home and lead a quiet, regular life’. This was in 1920. In 1922 he was leading an Everest expedition. In the next twelve years he enjoyed ten seasons’ climbing in the Alps and another two Himalayan expeditions. His life after retirement may not have been quiet, he wrote later, but it was certainly regular.
The third British member of Conway’s party was a young and unknown painter, A.D. McCormick. Many of the Indus explorers, including Hedin, had themselves painted the mountains near the Indus in an amateur way, but it was Conway, the art critic, who first took a professional painter on his expedition. McCormick was chosen, or so he believed, because he could make mountains look like real hills and when he first saw the high mountains his reaction must have been all that Conway could have desired: ‘Away in the heavens above I saw three great ice peaks, like towers of polished silver, which the passing blond shadows dimmed and brightened as when one breathes on bright metal. I had eyes for no other scenery that day, for I had seen heaven, and the great white throne.’ While Bruce climbed and Conway surveyed and another friend hunted, McCormick sketched, sitting near the river or high up one of its tributary valleys, utterly absorbed and utterly happy. ‘It was a perfect life,’ he wrote, ‘we felt that we lived the life we were meant to live.’20 It was a hard-working life, though. Before they left the region, the party had surveyed and mapped another 2,000 square miles of the Karakoram and assembled large collections of botanical specimens, minerals, butterflies and moths.

After Conway’s expedition western travellers began to arrive in Leh in some numbers. Earlier aspirants to the high Indus had been held back not only by the Tibetan and Ladakhi authorities but also by the British in India who had been unwilling to risk embarrassing incidents on their then unknown northern frontiers – as their treatment of Moorcroft had already shown. By the 1890s, thanks to the earlier explorers and surveyors and to the political arrangements which had gradually given them partial control of Kashmir and its outlying provinces, the British had enough confidence in their own outposts to open the gates.

The next notable explorers to reach Leh were Americans. Dr Workman, a general practitioner of medicine in Massachusetts, married, when in his early thirties, a girl twelve years younger than himself, the daughter of a former governor of his state. Fanny Bullock had been ‘finished’ in Paris and Dresden and had known, before Hedin, the Germany that Hedin had so loved and admired. Ten years after the marriage Dr Workman retired from his practice for reasons of ill-health. They decided to travel. They liked that new invention, the bicycle. So they bicycled through Spain and Algeria, then from Ceylon up through India to Peshawar. It seems that Dr Workman’s ill health, like
Mrs Bishop's spinal complaint, needed only exercise and interest. At the turn of the century the Workmans arrived at Leh.

He was then over fifty and she was nearly forty. They determined to 'conquer' as many mountains in the Himalayas, Karakoram and Pamirs as possible. In the next years they conquered many. They were rich, and organized well-equipped parties; but they were also brave and determined. The mountains were in themselves neither beautiful nor inspiring; they were objects to master. Like Moorcroft and Knight, the Workmans kept their eyes on the ground at whatever height, recording temperatures, heights and distances (though their surveying was not always accurate), listing flowers, examining glaciers, noticing how the peasants worked their land and tended their water channels.

For the people themselves the Workmans felt little interest and no sympathy. An old woman dressed in rags once brought Dr Workman a gift of two turnips 'in a wilted and wrinkled condition that had, evidently, had no acquaintance with the nourishing embrace of mother-earth for a considerable period'. Dr Workman presented her in return with some empty biscuit tins and a cigarette box which, he was confident, could be made by her into useful household utensils. Probably she was really begging; if so she had come to the wrong address. 'After we had observed her odd ways for a sufficient time, we tried to convey to her mind, by words and signs that it was not necessary for her to further prolong her friendly visit.' When she was still reluctant to leave, Dr Workman told his Pathan servant to drive her away and he 'accelerated her pace by stern exhortations till she disappeared from sight'. His Hippocratic oath apparently lost some validity for the doctor when he was climbing; that the villagers should ask European mountaineers for medical assistance was 'an unnecessary annoyance' since they were too stupid to follow instructions and most of the cases were hopeless anyway.

Like Hedin the Workmans were ungenerous to their predecessors and possible rivals. Another woman climber, Miss Peck, who took the Andes for her stamping ground, was viciously attacked by Mrs Fanny Bullock Workman when her claim to have climbed 'the loftiest mountain known' in the Western Hemisphere affected Mrs Fanny's position as 'the heretofore undisputed holder of the altitude record for women, won by strenuous effort on mountains presenting technical difficulties of the very first order'. So incensed was Mrs Fanny that she
personally paid for a team of European engineers to go to Peru and make an authoritative triangulation of Miss Peck's mountain; not surprisingly, perhaps, they found its peak to be lower than Mrs Fanny's.

The Workmans cared little even for their own companions. A Swiss porter working across a Karakoram cliff ahead of Mrs Fanny fell down a crevasse, was pulled out, but subsequently died.

My own escape [she wrote] was miraculous. Those who share the oriental belief in 'Kismet' might say his passing here was foreordained while others, believing in the 'survival of the fittest' have said that I, having work to carry on, was, by not taking the one step more, and by chance not being roped, saved to accomplish it. Qui sikt?28

With such a point of view Hedin would have agreed wholeheartedly.

After their exploits the Workmans were bemedalled, féted and honoured in America, France and Great Britain. But in their photographs Dr Workman still looks like a successful smalltown doctor of his time, conventionally dressed in dark jacket and striped trousers, heavily moustached, silver-haired and silver tie-pinned: he might be waiting for his next patient. Mrs Fanny, on the other hand, looks both the male and the female of an explorer. Commandingly erect, her white shock of hair held high, her black eyebrows level over a long nose, stiff in leg-of-mutton sleeves and starched ruffles, she stands behind her husband, one large well-kept hand resting firmly on his shoulder. Their only child, a daughter, was of their own spirit. She studied geology at London University and then married a Scot; as a young widow Lady MacRobert was left to bring up three sons. One died in 1938; when the other two were killed in the early days of the Second World War she presented the R.A.F. with a Spitfire named 'MacRobert's Reply'.

In the first half of this century so many westerners journeyed to and through Leh that the local inhabitants might sometimes have felt outnumbered in their own town. It is the biggest town in thousands of square miles but it is, after all, a small place.

In the winter of 1913 the Italian explorer Filippo de Filippi walked up to it along the frozen Indus through deep narrow gorges, always watching the ice for breaks, always aware of the swift-flowing water under his feet. As well he might be, for he
had a 150 porters with him, another 150 following behind, and pack animals carrying more than forty tons of stores. The people of Leh were extremely dirty, he considered. At this repetition of an old theme one wonders if any of Leh’s visitors had ever seen miners or factory workers in their own countries, or ever questioned whether cleanliness was practicable or even desirable in a place where the temperature and the wind froze the blood for much of the year, and every drop of water had to be channelled or carried by hand. The western eye for dirt seems to operate most effectively in the east.

Nicholas Roerich’s eye was as clear as de Filippi’s, or Moorcroft’s for that matter, but its range was longer; like Younghusband he looked for God. He was a Russian, prodigiously gifted, born into a family that could afford to develop his talents. He studied law, painting, architecture and archaeology, he wrote stories and poems, he designed settings for Diaghilev’s and Stravinsky’s ballets. When the great Revolution broke out in his country in 1917 Roerich left Russia. By now middle-aged he continued for a few years to paint, lecture and exhibit in western Europe and America. Suddenly, in 1923, then nearly fifty years old, he left the western world to lead a five-year-long expedition of artists and scientists into Central Asia. For him the long and difficult journey turned into a love affair. India, Kashmir, the Himalayas, the dusty valley of the Indus and Tibet were the very essence of beauty and romance. He painted continuously, mostly in tempera; white mountains stab indigo skies, elemental shapes mysteriously shroud themselves in mist, monastery walls are spotlit by a rising or setting sun and narrow green rivers rush between dark precipices. If his paintings are highly coloured and dramatic, they are generally comprehensible; his writings are not. He adopted a vague and visionary mysticism that could apparently be expressed only in turgid and almost meaningless prose:

White, never surmounted rises the mountain, full glimmering with snow and icy its rocky ridges. . . Beauty is the conqueror and knowledge the invincible shield. . . Let these, the Precious and Beautiful dwell unextinguishably within these walls. Let the united thoughts, as a creative stronghold lend their power to the beneficent beginning.24

But his love of the mountains near the Indus was certainly sincere, for he settled in Kashmir after his Central Asian expedition (founding an institute for research into the botany and ethno-
graphy of the Himalayas) and lived happily there for the last twenty years of his life painting and studying.

For Leh the good years of peace, of foreign visitors creating a busy commerce and of a government generally kindly but distant, lasted through the Second World War. But things were changing in the outside world, ominously for Leh. Air transport, if it could be used in the great mountains, might eventually make anachronisms of the ancient pack-animal trails that lead to Leh, and its prosperity and status as a market town would then inevitably decline. This could be expected to be a gradual process, and everyone would have time to adjust to the new circumstances. But the sudden and shifting clash of political interests far away from Leh confused and bewildered the mountain people more quickly, perhaps, than anything that had happened in their long history.

In 1947, after the Partition of India, Ladakh found itself under Indian rule while its neighbour to the west, Baltistan, was now in Pakistan. The ancient east–west trail along the Indus was closed. Soon afterwards increasing tension in Central Asia led to the closure of the borders of Sinkiang, blocking the north–south trade routes into the valley. By 1952 William O. Douglas, a judge of the Supreme Court of the United States, a passionate mountaineer and one of the last westerners to travel freely on the upper Indus, found the market in Leh virtually shut down. An Indian who went to Leh in the following year described it as 'a happy isolated town dying on its feet... quite unimportant as the Central Asian crossroads'.

But only ten years later it was 'a busy cantonment at the border, bursting at the seams'. One turn of the political cards had ruined it, the next, even more abruptly, had restored it. But not to its old self. Its ancient role as a trading centre is already half forgotten and the days when it supplied foreign explorers and climbers are over, at least temporarily, for Leh is now a garrison town, the northern base of the Indian Army confronting China and Pakistan.

For the west another silence has descended on Ladakh. What little information is available indicates that Leh is once again busy, bustling and important. Aeroplanes swoop in over the mountains, the flying time from New Delhi being not much more than an hour, trucks thunder across the Zoji La. Leh must now provide for a large semi-resident population, and the bazaar is open again, offering more sophisticated items today than barley
and yaks; for soldiers need cigarettes and matches, playing cards, buttons, needles and a score of other items unheard of fifty years ago. Money is pouring in because of Leh's strategic importance: the army has built roads along the Indus and airports in the narrow valleys, and the civil administration has set up schools and hospitals.

Inevitably the people themselves are changing. The old men still wear long woollen coats and splendid drooping moustaches, but most of the young are cleanshaven and dress in western style; even the peyrak may not last long in competition with the professional coiffures of army wives. There are profound changes, too. Polyandry, even Buddhism itself, has been discredited and the Ladakhis are experiencing both a population explosion and a spiritual bereavement. Free-flowing cash and government welfare may corrupt their honesty, even their self-reliance. But like the Tibetans with whom they have so much in common, the Ladakhis probably have enough tradition and humour to adapt the modern world to their own ideas and refuse to allow foreign values to be imposed on them.

At all events – like Tibet – the country itself does not change. Around Leh the patches of green must be irrigated and worked. The nomads of the tributary valleys have to find summer grazing for their flocks. The Indus spits white through the teeth of its gorges and occasionally smiles wide and placidly as at Leh. Even the works of man last long in this brisk dry climate. Unchanged in centuries the palace and the great monastery of Leh still ride high above the town like galleons.
This decade is probably the first time that a large garrison has been more or less permanently established between the Himalayas and the Karakoram but over the centuries the people of the Indus valley have had their full share of wars and invasions. Enclosed within their mountains and with little surplus energy to spare from the continuous fight against nature itself they apparently indulged among themselves in only limited and sporadic feuds and in such appallingly difficult country they might reasonably have expected to be left alone by outsiders. But they have lived for 2,000 years in the eye of a hurricane, caught up in the great winds of neighbouring empires that eddied around them, drawn into issues and battles which were never to their interest and always ended to their disadvantage. What the invader—from whatever point of the compass he came—really wanted was not their valleys or their land but command of the trade routes along the Indus and its tributaries and of the passes over the mountains.

Early history is mostly myths and legends; such chronicles as exist are confusing and contradictory. All over Ladakh Roerich came across boulders on which prehistoric man had cut outlines of ibex and archers and the ancient Asian good-luck symbol of the swastika; in the painted banners of the monasteries he found old motifs from China, Persia and India. It is certain that for hundreds of years Chinese, Tibetans, Kashmiris and Mongols fought each other up and down the gutter that the Indus has carved out of the mountains. Petty rulers might establish a temporary control over parts of the valley but were soon swept aside by the armies of their more powerful neighbours. From the seventh century to the tenth Tibetan and Chinese forces fighting each other for control of the passes north from the Indus repeatedly advanced and retreated along the steep and rocky trails and set up short-lived frontiers across the mountains. Fragmented by wars the people of Ladakh and Baltistan were also split by religion. They
were all originally animists; Hinduism spread north from India and, in the third century BC, Buddhism. A thousand years later Hinduism had largely re-established itself in Kashmir south of the Himalayas but Ladakh and Baltistan remained predominantly Buddhist. The astonishing explosion of energy that carried the Arabs to India and Central Asia was to introduce another faith into the high valleys: Islam. In the early years of the eleventh century Mahmud of Ghanzi, a proselytizing Moslem, according to some historians, a greedy brigand according to others raided annually into the countries lower down the Indus, and even into Kashmir, and at the point of the sword Islam gained many adherents. By the end of the fourteenth century an Islamic dynasty had been set up in Kashmir and in 1405 Baltistan was conquered and forced to become Moslem. The local feuds became more bitter.

In the fifteenth and sixteenth centuries, Kashmir several times invaded Ladakh across the Zoji La. In the sixteenth century Ladakh conquered Baltistan for a short time and then was itself invaded by the Moslem ruler of its capital Skardu, who destroyed Buddhist monasteries and forced the King of Ladakh to marry his daughter. The wars were not only local; a Mongol army from Kashgar in Central Asia, 5,000 strong, crossed the Karakoram -- an almost incredible feat -- and raided Ladakh and western Tibet; after three winters, and a final defeat by the Tibetans, twenty-seven men lived to retreat back over the mountains.

While all this was going on, the Moguls were establishing their empire in India. Turco-Mongols, they did not at first associate themselves with any particular religious way of thought and were, in any case, fully occupied in subjecting the Indian subcontinent. Ladakh and Baltistan were left relatively undisturbed for nearly a hundred years. But in the seventeenth century the Mongols once more invaded Ladakh from Tibet and this time Ladakh asked for help from India. Over the Zoji La came a Mogul army which, reinforced with troops from Baltistan, repelled the invaders in a great battle at Basgo, some twenty miles up the Indus from Leh, and threw them back to Tashigong. For this service the Mogul Emperor, Shah Jahan, insisted that the King of Ladakh should himself become a Moslem, build a mosque and allow India a monopoly of the Tibetan shawl-wool trade. The arrangement did not last long; as soon as the Indian troops had left, the Mongols returned and Ladakh got rid of them only by agreeing to pay them tribute too. Neither allies nor
enemies, once back on the far side of the mountains, were in a position to enforce the agreements and mostly Ladakh paid no tribute to either nor gave any other practical due to the nominal sovereignty of India but continued to live its real life, religious and commercial, in its relations with Tibet. Baltistan was Moslem but not overtly proselytizing and apart from occasional tribal conflicts the region was at peace.

The situation changed abruptly once more in the early years of the nineteenth century. Three hundred miles south-west of Ladakh as a bird would fly if it could cross the ramparts of the Himalayas, and some 800 miles lower down the Indus, another religious force was already on the way to building an empire, and looking northwards. The Sikhs, originating as a movement for the reform and purification of Hinduism, and aiming also to be a bridge between Hindu and Moslem, had by this time stirred up such antagonism as to have forged them into a formidable and exclusive warrior sect. By 1819 Ranjit Singh, the One-Eyed, had conquered Kashmir. At this point William Moorcroft, single-handed, entered the lists of political history.

His trade negotiations with the Ladakhis were going well and both sides were feeling optimistic and pleased with each other when – in 1822 – two things happened. Rumours reached Leh of Russian activity on the northern borders of Ladakh, which seem to have been in part well-founded, and Ranjit Singh sent envoys to Ladakh demanding the payment of tribute to him as the new overlord of Kashmir. Moorcroft not only believed the rumours and feared for his cherished dreams of British trade but promptly envisaged the possibility of a Russian force actually crossing the Karakoram to invade Ladakh, and perhaps allying itself with Ranjit Singh whose regime, with all its cruelties, he had seen at first hand and hated. When the Ladakhis – entirely voluntarily, he insisted – told him they wished to offer their allegiance to the British and ask for protection, he was therefore delighted to help them draw up their petition and to forward it to Calcutta. He even wrote a personal letter warning Ranjit Singh not to interfere in Ladakh. But in Calcutta the British authorities saw the situation with eyes very different from Moorcroft's. The East India Company's control over India then stopped short at the Punjab and Ranjit Singh's Sikh Empire, straddling the middle Indus, was a convenient buffer state against Afghanistan and the unruly tribes to the west of the river; Ranjit Singh was an ally of sorts, believed to be treacherous, but necessary. Moorcroft
was disowned and brusquely instructed not to concern himself with matters outside his competence. As with his iron horseshoes and his ambitious plans for trade in Leh, he had lost.

There was something curiously unlucky about Moorcroft; he was often right and later proved to have been so, but either he was too far ahead of his time for his proposals to be practicable or he had no gift for influencing and convincing his own countrymen. The end was melancholy. His pay and allowances had been stopped by the Company and as his prestige fell in Ladakh he found it increasingly difficult to sell the goods he had so laboriously brought there. Angry and resentful he was forced to wind up his affairs with credit furnished by a Yarkandi trader. The Company wrote to recall him but the letter arrived too late; he had already left Leh travelling westwards and he died in Afghanistan of fever not long afterwards.

Less than ten years after Moorcroft left Leh, and as he had feared, the two half-forgotten, almost independent provinces north of the Himalayas were invaded by the Sikhs when Zorawar Singh, one of Ranjit Singh’s lieutenants, crossed the mountains and marched south-east up the Indus towards Tibet. The Ladakhis again appealed for help to the British and were again ignored. By 1840 both Ladakh and Baltistan were under Sikh rule. Ranjit Singh himself had died in 1839 and the capital of his Empire, Lahore, was in confusion; it seemed to Zorawar Singh a good moment to follow up his triumphs by establishing his own control over the Tibetan wool trade. In a three-pronged attack, one column marching up the Indus valley, his forces, some 4,000 strong, advanced into western Tibet in the summer of 1841, disguised as pilgrims to Mount Kailas and the Holy Lake. There were just too many of them for this ruse to be successful, however, and the Tibetans quickly moved their own troops forward. In the winter of that year the Sikh Army was decisively defeated and Zorawar Singh killed near Lake Manasarowar. By 1842 the Sikhs had retreated to Ladakh and were being hard-pressed by the Tibetans, Ladakhis and Baltis. Many of the Sikh soldiers, unprepared for the climate, lost hands and feet through frostbite. One occasion a unit, caught on the wrong side of the Indus near its confluence with the Shyok, is said to have saved itself by partly damming the river with branches so that it froze in the night and they were able to cross on the ice.

Beyond the immediate arena China, Nepal and the British in India had watched the struggle with concern, each for different
reasons anxious that western Tibet should not fall to the Sikhs, each relieved when the war ended with the Sikhs confined to Ladakh and Baltistan. For a time it had seemed that the supply of fine wool to India (and the British now appreciated this wool as much as the Mogul emperors ever had) might be cut off. Once the Indus trade routes were open again the British accepted Gulab Singh Dogra as ruler of Ladakh and Baltistan without demur. Three years later when war broke out much lower down the Indus between Ranjit Singh's successors and the East India Company they were to be glad of this for Gulab Singh, instead of going to the help of the Lahore Government to which he owed allegiance, remained neutral and even acted as intermediary between the two parties.

The war was short, hard fought and, at great cost to them, ended in victory for the British. The Sikhs were forced to give up their claims to a large territory south of the upper Indus, which included Kashmir, and, in accordance with the normal practice of the time, to agree to pay the Company a substantial cash indemnity. But the full sum demanded by the Company could not be delivered, and a week later, in Amritsar, the Company officials signed a separate agreement with Gulab Singh transferring to him, for a very much smaller sum of money, most of the area that had just been ceded to them. For the British, who had no desire to annex Kashmir and now hoped to protect the northern frontiers of India through the installation of a more-or-less reliable ally while, at the same time, weakening the strength of the Sikh Empire, and for Gulab Singh, now confirmed as the independent overlord of the rich and lovely country of Kashmir as well as the strategically important trans-Himalayan provinces on the Indus that he had already conquered, the 1846 treaties of Lahore and Amritsar had splendid advantages. For the Sikhs in the Punjab, naturally, the arrangements were less acceptable and it was to be only a short time before they took up arms against the British again. For the Ladakhis, Baltis and Kashmiris Gulab Singh apparently proved to be relatively tolerant in matters of religion but, according to Younghusband, he 'was never a popular ruler, and the people feared and dreaded him'.

Although the British wanted no direct responsibility for the provinces north of the Himalayas they were anxious to ensure that the carriage of wool from Tibet to India should not again be blocked. The security of Gulab Singh's frontiers on the north-east of Ladakh was of great importance in this connection and in
1846 and 1847 the British sent surveying parties north to try to determine, in agreement with the Tibetans and the Chinese, exactly where these frontiers were. The Chinese, arguing that the ancient traditional frontiers were well known and needed no formal demarcation, refused to co-operate. Several times in the nineteenth and twentieth centuries the British tried again to persuade the parties concerned to agree to a more precise definition of their frontiers but with no success. Generally speaking the ancient boundaries between Ladakh and China and Ladakh and Tibet were in fact observed for many years and the matter seemed of no great practical importance.

Gulab Singh’s son continued his father’s policy of friendship with the British and Kashmiri troops fought beside the British in the Mutiny of 1857. After the Mutiny, when control of India passed finally from the East India Company to Parliament in London and Queen Victoria found herself represented in India by a Viceroy, the attitudes of the British authorities in India to the countries on the upper Indus remained at first basically unchanged. In 1868, referring to Kashmir, the Viceroy declared that ‘our policy in regard to kingdoms on the frontier is now, and ought to be, especially one of avowed conciliation and scrupulous forbearance’. The rulers of Kashmir had displayed ‘zeal and fidelity . . . to the British cause at various important epochs’. The Government of India had an ‘earnest desire’ to have ‘in the space between British India and Central Asia, at least one friendly State, and one Ruler, thoroughly well-disposed to British ascendancy and influence’. These lofty sentiments did not, however, prevent the British from trying to find out all they could about the geography of the space between India and Asia, nor did it stop them from pursuing Moorcroft’s old dream of developing trade with India and Central Asia.

In the Company’s days some surveying had already been done. Cunningham had reported on Ladakh, the Stracheys on western Tibet. Paid by the King of Prussia and the Company to undertake a scientific expedition the three Schlagintweit brothers, Hermann, Adolphe and Robert, Germans and protégés of the great scientist and explorer of Latin America, Alexander Humboldt, had travelled together and separately over northern India and into parts of Central Asia for several years, constantly measuring, checking and recording, and had published their findings in four massive volumes crammed to the covers with statistical tables and technical data. But Adolphe had lost three servants, one sold as a slave,
the second, a Jew, forced to turn Moslem and the third executed, and soon afterwards— in 1857— was himself beheaded. Exploration was not only dangerous for the explorer but might prove to be embarrassing for the British authorities, involving them in protests, diplomatic complications and even the despatch of rescue parties or punitive expeditions, and for a time official policy was quite clear on the matter; Britons— indeed explorers in general— had a perfect right to get themselves murdered if they wanted to, but not on India's doorstep. Men who crossed the Himalayas without British approval (which was very rarely given in these years) might preserve their lives but would almost certainly lose their careers. W. H. Johnson, surveying into Central Asia at the invitation of an independent chieftain, was censured for his efforts, as Moorcroft had been forty years earlier, and then dismissed. But somehow or other, the British knew very well, they needed to learn in detail the geography of the northern frontiers of India. Beyond the Karakoram, from all accounts, a great deal was happening. China was dealing unsuccessfully with insurrection, the trading caravans coming south to Leh were being harassed by brigands, Russia's attitude was suspicious. The air the British breathed in India was full of rumours and even Moorcroft's fear of invasion from the north now seemed less fantastic. The great mountains obviously presented an appalling obstacle to an army but possibly not an insuperable one. Exactly where and how long were the trails between the Indus valley and Central Asia? Where and how high were the passes over the mountains to the north of the river? Nobody really knew. What was needed was hard facts and since, for diplomatic reasons, British explorers could not be used, the solution was to send Indians.

In the early 1860s, therefore, the first of the Indian mountain surveyors was recruited. For two years the 'pundits' were trained to use sextant, compass and stars in fixing position and direction, to measure heights by boiling water and to make accurate maps. Then they disappeared over the border disguised as traders or pilgrims or, more often, as Buddhist monks whose prayer-wheels held compasses and notes, not sacred scripts, and whose rosaries comprised one hundred beads, for ease in counting their steps to measure distances, not the orthodox one hundred and eight. One of them reached Lhasa itself, walking all the way, measuring distances step by step and taking latitudes with a disguised sextant. Months, often years, later they would return
to India, as inconspicuously as they had left it, with a hard-won collection of data on routes, distances and heights to be analysed by the British officials.

Gradually, for the most part reluctantly, the British were opening other windows on to the Indus. In 1867, in response to complaints from Punjabi traders, an agent was sent to Leh for the summer, to reduce the customs levied by Kashmir; his appointment was sanctioned by the Viceroy only as 'an extreme measure' and 'a temporary arrangement'; in fact it lasted for a long time. In Kashmir Gulab Singh had already been obliged to agree to the appointment of 'an officer on special duty' in 1852, a loose arrangement apparently intended by the British for the control of their own obstreperous sportsmen rather than the promotion of trade or better administration in Kashmir. But as so often in British India one thing led to something larger; political officers replaced the special-duty officers and were themselves succeeded by Residents who, silk-gloved but often iron-fisted, 'advised' the Maharajah in all his affairs. (Much later a British official reported that when the Maharajah was told that his Resident might be upgraded, in Civil Service terms, to first class, he said: 'Thank you very much, I have had so much trouble with second class Residents that I have no desire to deal with first-class ones.') In 1877 an 'officer on special duty' was appointed at Gilgit, two hundred miles down the Indus from Leh, and instructed to watch the southern end of the Karakoram passes.

By now Russia was definitely known to be sending agents and army officers south towards the frontiers of India. More or less clandestinely this had been going on since 1807, when Tsar Alexander of Russia signed the secret Treaty of Tilsit with Napoleon incorporating a plan for a Russian–French invasion of India through the Middle East. The treaty was not secret for long and Napoleon was soon defeated and banished; but the Russians continued to probe down towards India, as if seeking for a soft entry point. As their efforts intensified the British in India (some of whom may have wryly recalled Moorcroft's early warnings) began to take defensive action and 'The Great Game' – the shadowy, see-and-run contest between Britain and Russia in the high mountains – got under way in earnest. From the material the pundits and other surveyors had collected it was still not clear whether India could in fact be invaded from the north or not. In 1889 Francis Younghusband was despatched to find out.
He was then a Lieutenant, and only twenty-six years old, but he had spent the best part of five years exploring north of the Karakoram; when the British moved him forward in the Great Game it was not as a pawn but a knight. He was given six Gurkhas to accompany him. In Kashmir he found the people less vigorous or robust than the English, but in comparison with them 'the ordinary Englishman looks remarkably uncouth and rude'. The small party heading always northwards crossed the Himalayas, the Indus and then the Shyok, which in summer he said was 'a mighty rushing river, and crossing it in a ferry boat on its swirling surface causes wild excitement'. He heard of Russians on the far side of the Karakoram, claiming to be interested only in scientific exploration. Near the headwaters of the Shyok the local tribes were terrified by repeated raids from Hunza, to the west, and their chieftain asked Younghusband to accept his allegiance to the British in return for protection. Younghusband assured him that the request would be referred to the Viceroy, and staged the most impressive durbar possible with his limited forces, himself wearing his King's Dragoon Guards uniform, his six Gurkhas marching backwards and forwards in full dress, presenting arms and firing salutes. The British Government, he said, would take measures to prevent the Hunza raids and the tribes were relieved and pleased. A little later he reached Hunza. Here he solemnly explained to the brigands that 'the Queen of England was naturally very angry at her subjects being raided, and has sent me to see their chief and come to some arrangement with him by which they could be stopped.5' This confident assertion, delivered in the very fortress of the raiders, was effective – at least temporarily. Farther north Younghusband actually met some Russians; they were very cheerful and hospitable, but assured him that the entire Russian army thought of nothing but invading India. Two years later, on another mission of exploration and counter-intelligence, Younghusband again ran into a Russian party, this time in the Pamirs; they told him he had no right to be there and as he was outnumbered he was forced to agree to leave, giving his word not to travel by certain specified passes. The list included all the passes then known to lead back to India and the Russians clearly intended to delay his reporting in India by forcing him to return through China. Younghusband was equally determined to get back to India quickly. He kept his word and used none of the prescribed passes. But he had caught the smell of another possible way over the mountains, unknown
to the Russians or to any other foreigner, took a chance and with
terrible difficulty struggled back to India many months before
the Russians had thought he could possibly arrive there.

The Great Game continued for some years, played sometimes
enthusiastically, sometimes slackly, depending on the often con-
flicting reports of military spies on the practicability, for invasion
or defence, of the various passes, and the particular interest of
individual politicians in Moscow, Delhi and London. As so often
before the Indus valley itself was considered important by out-
siders only as a path between the mountains and a means of
access to the passes leading to the north and south of it. Gradu-
ally Russia and Britain turned their attention to Europe, where
the storm clouds of the First World War were building up.
Russia became increasingly and desperately occupied with its
own affairs. The Great Game petered out and the countries near the
high Indus were once more forgotten by the outside world. But
in their own world and to themselves, naturally, they remained
supremely important. In the last years of the nineteenth century
there had been various tribal uprisings further down the Indus, in
the region where the river turns south to break out of the moun-
tains, but Kashmir, including Ladakh and Baltistan, had remained
fairly quiet. In retrospect one can see this was an ominous quiet,
the indrawn silence before the first gusts blow out of the sky.

Over the years the Sikh rulers of Kashmir had lost their own
religion and reverted to Hinduism. A Sikh historian has written
that ‘wherever Sikhs are scattered among other people, the
attachment to tradition declines, and the rate of apostasy rises’.
Outside Ladakh, Kashmir was overwhelmingly Moslem. In the
Punjab the Sikhs had had bitter conflicts with Islam. It was per-
haps inevitable that over the years the Maharajahs of Kashmir
should succumb to what has been called ‘the accommodating
embrace of Hinduism’. Gulab Singh’s grandson, the third
Maharajah, who ruled from 1885 to 1897, was an orthodox
Hindu. Hindu and Moslem lived side by side in mutual dislike, the
Moslem majority increasingly bitter against the cruelty and greed
of their Hindu overlords, until almost exactly a hundred years
after Gulab Singh’s acquisition of Kashmir, the British left India.

In 1947, when the British Indian Empire was divided into the
two separate states of India and Pakistan, the princes who had
kept power in their own domains through special treaties of
friendship and allegiance to the Queen of England were invited
to choose whether to join India, self-professedly secular but in
numbers predominantly Hindu, or Pakistan, loudly and proudly Moslem, or remain independent. The Maharajah of Kashmir—a Hindu ruling a largely Moslem population—hesitated and procrastinated. While he was still trying to decide how to trim his sails the tiller was wrenched from his hand by the peasants in the west of Kashmir who revolted against the regime largely, it seems, for economic rather than religious reasons. They succeeded in driving the Maharajah’s troops out of a sizeable area. But the Hindus were treated savagely; in other parts of the state, where Sikhs and Hindus happened to be in the majority, the Moslems were practically eliminated by murder or forced eviction. Tribemen from the North-West Frontier, inflamed by reports of the treatment of their brother Moslems, poured into Kashmir from the west; other tribesmen from Baltistan and Gilgit, its western neighbour, marched up the Indus to Ladakh, nearly reaching Leh.

At this the Maharajah declared his accession to India and appealed to India for help. Indian Army troops were quickly flown in, in large numbers, and the tribesmen were driven back. In Gilgit the British Agent had been withdrawn on Partition and the Maharajah had appointed a Hindu Governor; on the news of the Maharajah’s accession to India the local militia, the Gilgit Scouts, in an almost bloodless revolution, put the Governor under house arrest and hoisted the Pakistani flag. The Indian Air Force bombed Gilgit but with little effect; the Gilgit Scouts, after an almost incredible journey across the Indus and the high mountains in the early spring, turned up on the Zoji La. Fighting here was particularly fierce. The Indians had to push and pull their tanks up to the pass and their Commander said, ‘No battle like this had ever been fought before. It was a combination of jungle and mountain warfare.’ After six months the Indian Army had succeeded in driving the tribesmen back so far west that Pakistan, until then loath to commit itself officially to war with India, began to send in some army units to hold strategic positions in the areas near her borders. Fighting continued for another six months, well into the winter of 1948 when, quite suddenly, a ceasefire was declared. Both countries appealed to the United Nations which was unable to help them to reach a political agreement (since India and Pakistan could not agree on principles or interests), but succeeded in establishing a ceasefire line between them, a line that cut across the Indus leaving most of Baltistan and western Kashmir to Pakistan and Ladakh and eastern Kashmir, including the Vale itself, to India.
Neither India nor Pakistan, who both feel passionately about Kashmir — India largely as a matter of national pride, Pakistan for economic as well as religious reasons — considers the issue settled. In 1965 hostility blazed up again into a short war after which both sides claimed victory, the Russians sponsored a peace treaty, and the United Nations ceasefire line was re-established. It is watched constantly by a U.N. Military Observer Group consisting of officers from different countries, armed only with binoculars. The roster changes regularly: in 1968, for example, the U.N. Group was drawn from Chile, Uruguay, Denmark, Canada and Finland. If private soldiers are needed, such as drivers, they are furnished by the Indians in India and the Pakistanis in Pakistan.

At best the U.N. could only enforce a stalemate and the position of Kashmir is ‘only likely to be settled’ according to a modern historian who knows both countries well ‘if India, which has so much less to lose, feels able to make a generous gesture’. No such gesture has been made; on the contrary India, after taking the side of East Pakistan in its terrible conflict with West Pakistan in 1971, seems now more intransigent than ever. The West Pakistanis were foolish enough to start hostilities on the Kashmir frontier; India, much more powerful, naturally defeated them and gained strategic territories on the western side of the U.N. line. She shows no inclination to give them up.

In the last twenty years the people on the high Indus have perhaps been more bedevilled by the interests and actions of outsiders than at any other period of their history. Ladakh and Baltistan, ancient antagonists, had been neutral if not friendly neighbours for many years before India and Pakistan made them enemies once again. An even more dramatic conflict, between India and China (with Pakistan as an interested observer and sometimes a near-participant) affects the whole Indus valley from western Tibet to Gligit.

Up to the outbreak of the Second World War the British authorities had continued to try to obtain Chinese and Tibetan agreement to a clear demarcation of the northern frontiers of India and failed, partly because of their own refusal to admit the validity of any interests other than India’s security, partly because China, internally divided, felt herself in a weak negotiating position. At Partition the question was still unsettled. At the time this seemed unimportant, especially as the new Indian state and China professed the warmest friendship towards each other.
But as the communist regime in China gained strength the Indians began to feel an increasing pressure from the north. In 1950 the Chinese re-asserted their old claim to sovereignty over Tibet by invading the country. By 1956 they were building a road parallel to the Indus across the Aksai Chin (the desert of the ‘white stone’) north of Ladakh; when India protested, China responded by claiming the area as its own. Relations between the two countries steadily deteriorated and a series of meetings made no headway in determining the frontier. The Chinese established military outposts in northern Ladakh, the Indian Government built a road across the Zoji La. In 1962 Chinese and Indian troops came into open conflict on the north-eastern frontier of India as well as in Ladakh; the Indians were generally defeated but the Chinese suddenly broke off the fight and withdrew believing, apparently, that they had by then demonstrated sufficient strength to encourage India to come to terms.

Nothing has been settled about Ladakh’s northern border and Pakistan’s role in the dispute between India and China may be vital. Pakistan has its own border problems with China, centring like so many conflicts in the Indus basin on the passes that might possibly allow armies to invade from the north. For a brief moment it seemed that Pakistan might stand with India against the threat from the north, but – mainly because of Kashmir – it was only a very brief moment and Pakistan soon realised the economic, military and political advantages she might gain from friendship with China. Another Chinese road has been built north of the Karakoram; an off-shoot starting near K2 now runs south into Gilgit providing ‘a spectacular short-cut for China’s growing exports of cheap consumer goods’9 to the Indian Ocean. Not only consumer goods. Chinese military equipment for the Pakistan Army is carried south on these new roads.

Nothing is settled along the gutter of the Indus – nothing in political terms, that is. Waves of invaders have spilled over the great mountains, waves sometimes fetching for thousands of miles from High Asia, China, Arabia and England. Where Knight’s ‘Three Empires’ met only eighty years ago four powers – China, India, Russia and Pakistan – now converge. The new Great Game has more players than the old but the pieces are still the same. Tribal feuds, religious differences and commercial competition can still be exploited to the advantage of one player or another. The high passes are watched as jealously today as they ever were.
Leh is about half-way along the great north-westerly gutter of the high Indus; soon after it the Indus crosses the contested international boundary between India and Pakistan. The political change is not reflected in the topography: the river, still dropping fast, is hemmed by gorges as bleak and precipitous as before, interrupted only occasionally by small patches of cultivation. Gradually the mountains draw nearer on both sides, and taller. The steep and narrow Ladakh Range south of the Karakoram borders the Indus on its right bank; on the far side of it the Shyok runs parallel to the Indus for 150 miles before the Ladakh Range ends and allows it to join the main river. Twenty miles later another major tributary, the Shigar, runs down to the Indus from the heights of the Karakoram near Skardu, the capital of Baltistan.

The Shyok, the Shigar and the scores of lesser rivers spell danger as well as survival to the inhabitants of their valleys. Many of them are born in glaciers which 'are sinister brutes, and sometimes they display an intelligence in their designs against humanity that is positively Satanic. The cataclysms for which they are responsible in this part of the world are comparatively common, and when they occur the destruction to life and property is lamentable.' Each steep cleft in the mountains can suddenly pour down a terrible mass of mud and boulders to overwhelm everything in its path, for there is practically no scrub or grass to hold the earth together and the snow-melt loosens the rough conglomerate without warning. There are occasional earthquakes; there are often appalling storms. For over five centuries Islam has prevailed in Baltistan and in the neighbouring countries to the west, the religion of absolute submission to an absolute Almighty, but the people who live here still believe in demons and fairies as well as God and place offerings in secret shrines to propitiate the powerful and capricious spirits of rivers, winds and mountains.
Sometimes, especially in autumn, when the rivers' sources and tributaries in the high mountains are already freezing, they have a deceptive calm. Filippo de Filippi photographed far white peaks towering beyond fields of boulders through which, a blue and tranquil stream, the Shyok gently meanders. But the people who live beside the Shyok are not deceived: they build their villages well up the mountainsides so as to be clear of the ice-encumbered torrent that, they know very well (for it has happened over and over again), will sweep down their valley next year or the year after, or in ten years' time. Caravans aiming for the Karakoram Pass in the months when the pass is open, and the Shyok therefore in summer spate, assemble early in the morning on the river bank and induce a porter to try to find a footing through the river, which Fraser, an early-twentieth-century traveller, found to be 'full of lumps of ice racing along almost completely under the water. These small icebergs weighed from fifty to one hundred and fifty pounds, and were travelling at anything from five to fifteen miles an hour.' As the morning wore on and the river began to rise he decided he must cross soon.

In the very first current, with the water up to my pony's belly, a lump of ice struck him square on the hocks, and he nearly jumped out of his skin. Fortunately we were close to one of the shallows, and for this the little brute made a dart. If I hadn't been frozen to the saddle by the cold I must have fallen off, but the feel of that water round my legs put the rest of my body in such a funk that I was physically incapable of letting go. It was impossible to cross at right angles owing to the depth and force of the water, and because of the ice. We therefore went down with the stream, edging across when opportunity offered, and returning upstream along the intermediate banks. The crossing occupied about an hour and at the end of it I had to take off my boots to see if my feet were alive.²

The Shigar is less violent than the Shyok; it is a shorter river and its upper reaches are not dominated by sliding glaciers of the type that make the Shyok so dangerous. Its valley slopes down only gradually to the Indus. In the heart of a high wilderness of tumbled rock friezed by the peaks of the Karakoram, suddenly, wide and smiling, the Shigar valley sparkles in the sun, scattered with poplars and willows, crisscrossed with waterchannels, green with wheat, maize and barley in spring, golden in autumn. Apricots, tomatoes and melons grow here and the best nectarines in the world. Not so long ago the nuts and dried fruits of Baltistan were in steady demand at the Leh market, but now that the
old trade route up the Indus is closed the fruit rots in the grass below the trees. If it could be sold in the lower Indus plains – what they call the ‘downcountry’ in Baltistan – the Baltis would be rich, but it is delicate stuff and practically impossible, in present conditions, to transport so far.

The green fertility of the Shigar is no gift of fortune, it is the result of endless, backbreaking work, the struggle of peasants to move rocks in the beds of icy streams, the continual checking and repair of miles of flimsy clay dykes. Not only cultivation but also, in a very limited way, transport is served by the Shigar. Occasionally a wooden boat can be seen, a primitive triangular affair, flat-bottomed and high-sided, but the traditional means of taking to the river, still in use today, is by raft. A number of goatskins filled with air and tied together, legs up, supports a framework of sticks, several men with poles and a cargo of fruit and vegetables for the market at Skardu; since the goatskins always leak it is necessary to re-inflate them constantly by blowing down the legs. The river runs too fast for any boat to stem it by poling or rowing, so from the downstream end of their journey a wooden boat has to be towed back by men trudging along the sandy shore while the rafts are simply divided into their separate goatskins, deflated and carried back to the starting point.

There is only one adjective for the Indus valley at Skardu: it is fantastic in the precise and literal sense of the word. It is a great oval basin, 7,500 feet above sea-level, some twenty miles long and eight miles wide, enclosed in rocky mountains, purple, red, grey and ochre, that soar up to 17,000 feet. The valley is carpeted in fine pale sand through which, green in winter, in summer grey as tarnished silver, the Indus snakes lazily between wind-ribbed dunes and past a single enormous rock standing high and isolated in the river bed – like the rock of Gibraltar Conway thought – on which stands the Askandria Fort. In millions of years the river has progressively cut its way deeply down into the rock, and the cliffs that now wall the valley are ledged and terraced at the different and descending heights of the old beds of the river. Further back the dry and bony mountains rise to their jagged crests intricately folded and overlapping; at the two ends of the basin, where they converge, it seems impossible that even a great river can force a passage through them. The air is so clear that the eye is continually misled; everything looks close, there are no perspectives; only with binoculars does the shrub apparently a few hundred yards away on the far side of
the Indus disclose itself as a large tree at least three miles off and the children playing with a box at the water's edge become grown men launching a raft. 'Many levelled,' wrote Conway, 'nothing to look at . . . splendid to look from. Every point commands a view that holds the eye. Nowhere are more numerous and varied mountains brought together. Nowhere do so many near hills break the panorama more kindly. Nowhere is the atmosphere more rich or the colouring more superb.'

But in the morning, early, there is almost no colour; the sands are white, the mountains are flat and silver-grey. As the sun climbs higher the mountains become light brown, lilac-shadowed, brindled on their northern slopes with snow, but even at midday still curiously insubstantial. Only when the sun begins to sink behind the highest western ridges do the mountains to the east, upriver, take on a new quality of solidity; darker shadows creep up their sides, purple and brown, and against a light-blue sky their crests are as pink and sharp as coral or a hard rusty red. Sunset is spectacular. Colour drains out of the sky and mountains as the heat drains out of the air; a cold east wind springs up to rustle the poplars, and the mountains are all grey, every pale cold shade of grey, brownish-grey, bluish and yellowish, streaked with white. Then the miracle happens. Quite suddenly the clear amber sky in the west flushes pink to the zenith, the mountains standing black and sharply ridged against it. To the east everything comes alive again, the sky is once more blue, the mountains recover their depth and volume and between inky shadows their sculptured planes are warm, brown and pink. At their foot the Indus, dark pewter, twists between the pale wide sands. The sky darkens slowly and the mountains become black silhouettes, but still the white sands beside the Indus glimmer in the starlight.

G. T. Vigne, an Englishman, believed himself to be the first European to see Skardu (he was wrong; Moorcroft had been ahead of him). He arrived there in the 1830s. The early Portuguese missionaries would almost certainly have crossed the Himalayas to the Indus valley by the Zoji La and so reached the river too high up for Skardu, but Moorcroft must have been in Skardu at least ten years before Vigne arrived. There were, wrote Moorcroft, 'some vague traditions' that the town had been founded by Alexander the Great. 'Iskander' is what the people of northern India make of the name 'Alexander'; Askandria, Skardu’s fort, is near enough, and the connection is attractive. But on inquiry Moorcroft could trace no vestiges of Greek
civilization and historians now agree that neither Alexander himself nor his successors near the Indus came so far north.

Vigne's reason for going there was couched in terms with which Mrs Bishop and Dr Workman would have sympathized: 'An impaired state of health, an anxious desire for breathing cold air, and the prospect of enjoyment among the magnificent scenery of the Himalayas, combined to send me to the north of India.' He described himself as 'a private traveller' having no connection with the East India Company (perhaps this explains why he apparently knew nothing of Moorcroft's journeys) but he set forth with a considerable entourage of servants and guards and evidently expected to be received and entertained by the local dignitaries. Gulab Singh in Kashmir and his lieutenant in Leh were disappointingly inhospitable, and the Rajah of Gilgit went so far as to burn down the bridge over the Indus that leads to Gilgit in order to stop him entering the place. But in Skardu Ahmet Shah, who was to prove the last independent Rajah of Baltistan, treated him royally, lodging him in his own house just below the fort on the great rock in the middle of the valley. The fort, he reported, was 'a confusion of breakneck stairs, low doors and dark passages'. Across the plain of Skardu, where he was interested to notice many garnets lying about in the sand and rock, Vigne was taken to see the Shah's defences which seemed impressive. There were three 'gateways', he wrote, one at each end of the valley on the Indus itself and a third on a stream entering opposite the Shigar, all at places where the gorges narrowed to twenty-five feet or so. Great walls of wood and stone with loopholes for firing through had been built right across the narrows, almost down to the level of the rivers; people could pass them only by wading, bent double. From above, the Baltis could roll rocks down on the heads of their enemies. The defences turned out to be more formidable in appearance than in effect, however, for only a short time after Vigne stayed in Skardu the Askandria Fort was captured by Gulab Singh's forces and Baltistan became a province of Kashmir.

The fort, as it happened, was very nearly the end of one explorer. In 1903 Mrs Fanny Bullock Workman sprained her ankle in Kashmir while she and her husband were preparing for a journey to the Karakoram. Naturally this accident was not to be allowed to delay the expedition, so Mrs Fanny, a stout party, had to be carried over the Zoji La and down along the Indus in a dandi, a sort of canvas bag slung between poles resting on the
1. Moorcroft and his companion Hearsey, wearing Indian dress, meet two Tibetan horsemen near Lake Manasarowar, by Hyder Hearsey, 1812
3. Khinyang Khish, a peak in the Karakoram range

4. A ford on the high Indus: anonymous watercolour, c.1863
5. Tibet by Nicholas Roerich

7. Leh, Ladakh, Kashmir, by W. Simpson

8. Women of Ladakh by
shoulders of four sweating porters. The expedition included no less than eighty-five ‘coolies’ so a shift system could easily be arranged. By the time they reached Skardu she naturally felt full of energy and anxious to try out her mending ankle. Dr Workman set off for a nearby mountain, so Mrs Fanny decided to climb the ‘Rock of Skardu’. With one of the porters as companion she got to the top but her ankle had become very painful again and she knew that it would be impossible for her to descend by the same route. She sent the porter off to find out if there might be an easier way down; while she waited she drank the half-flask of tea that she had with her and ate her two biscuits. There was no shade at all: she could only lie there in the blazing sun. Between the heat, the pain of her ankle and increasing torments of thirst she must have been in a pretty bad way, though she makes little of it, merely observing factually that by midday the rocks were so hot that she could not bear to touch them. At last her porter returned with a two-quart flask of tea, which she gulped immediately, and a local peasant to help on the descent. The three of them climbed down through the fort with a good deal of difficulty because the walls were mostly rotten. The whole expedition had taken thirteen hours.

The heat of the Punjab plains is intense; on 31 May 1903, for example, the Workmans recorded that the temperature in the shade at Lahore was 113°F and in the sun 172°F. But at higher altitudes the sun temperature goes even higher and on the barren slopes above the Indus there is no shade and the rocks breathe out the heat like a furnace. At 17,000 feet, the Workmans reported almost incredibly, they once registered a temperature of 204°F. There is not even the comfort of travelling light, for the appalling heat of the day is succeeded by bitter cold when the sun goes down. On another occasion, at over 21,000 feet, the Workmans’ thermometer went to 193°F in the afternoon and dropped to minus 4°F at night.

Many of the western explorers who travelled the Indus trail after Vigne must have passed through Skardu but there are few descriptions of the place in their books, apart from Conway’s. A surveyor who passed through in 1848 listed the trees and shrubs and flowers he found there. They were mostly alpine and scattered but could attain an almost subtropical variety of luxuriance in sheltered places beside watercourses. There were large numbers of chakor or painted partridge and he watched the Baltis hunting them, driving them backwards and forwards.
within a circle until the birds were so exhausted that they could be picked up by hand. Bruce, who arrived at Skardu towards the end of the nineteenth century by riding, walking and raft remembered afterwards that he had been 'in clover' as he had met two British officers, 'capital performers on the banjo, and we were very happy, assisted by the cup that cheers and unfortunately inebriates'.

The pictures that this conjures up, of the three army officers strumming away (and on the banjo of all instruments!), noisily singing and toasting each other in a wildly remote and foreign place, conveys something of the almost casual bravery and almost innocent arrogance with which Queen Victoria’s servants coloured red so much of the map of the world. The Skardu villagers might have been offended by Bruce's party; more probably they reacted as most people in India did, and simply thought the British mad.

Gulab Singh’s successors had administered Baltistan from Kashmir; the Maharajah owned the land, the Baltis worked it under the eyes of his troops in the Askandria Fort and paid heavy taxes for which they got little in return. Skardu in the early twentieth century was little changed from Vigne’s day: ‘It is the headquarters of the Kashmir civil administration of the country and also boasts of a small bazaar, a post and telegraph office and an old fort.”

On Partition the Moslems of Baltistan finally rebelled against the Maharajah. An irregular force from Gilgit succeeded in scaling the heights above the Askandria Fort and overcoming it; the Baltis then offered Pakistan their allegiance and petitioned for arms. An airlift between Rawalpindi and Skardu was arranged, and though India later re-occupied part of eastern Baltistan, Skardu itself remained on the Pakistan side of the United Nations ceasefire line. Below the old fort, facing uncompromisingly east towards India, new fortifications have been built into the ‘Rock of Skardu’.

The Government is now trying to develop the region. The small town of Skardu, which stretches across a flat terrace a hundred feet above the Indus, is being reconstructed with wide roads and new bazaars; already a monument has been built in what will eventually be the central square in commemoration of the men killed during the fighting at Partition. There is a new hospital. When Vigne was in Skardu he found the Baltis terrified of smallpox, anyone who contracted the disease being banished to a ‘pest-house’, a lonely cave above the Indus. Nobody was
allowed to visit it, and though some food might be left nearby the sick were expected to die quickly. Today the doctor’s main preoccupation is the diseases that are caused by dietary deficiencies, such as goitre. Several schools have been built. Agriculture, far and away the most important business here, is promoted by governmental agronomists and foresters who undertake research into the special problems of the soil and climate and advise the farmers on their crops. Even tourism is encouraged, on a limited scale; there is a rest house on a bluff above the Indus just outside Skardu and another beside a lake a few miles away, and here the traveller may sleep. But he will be wise to organize his journey in advance, to have local introductions and to take plenty of food with him, for there are few amenities in Baltistan. The sandy streets of Skardu are as clean as a picked bone; there is no rubbish; everything is used over and over again. Cars are non-existent; the few jeeps and tractors are still such novelties that the people are as startled as goats when they hear one of them coming and equally likely to leap over the wall into the next field. At certain seasons the market overflows with fruit and vegetables; eggs can usually be obtained, and chickens about the size of blackbirds, but there is very little else. Everything that cannot be grown or made locally — and the range is very narrow — has for centuries been brought to Skardu along dangerous trails by yak and pony. Today it comes over by jeep or by air.

Of all the changes that Skardu has seen in the last twenty years it is the change in methods and speed of transport from the world beyond the mountains that has most affected it. After the emergency airlift was no longer necessary a regular pattern of deliveries was established; by 1968 up to six or seven civilian aircraft (only one for passengers, the rest reserved for seeds, machinery and other essentials) were putting down on the sandy airstrip on each day of fine weather. The time from the southern side of the Himalayas, which used to be measured in weeks, is now little more than an hour.

It is a memorable hour. Starting from Rawalpindi the plane flies slightly east of north, steadily climbing as the mountains rise beneath it. Only a few thousand feet below, the rocky mountain slopes, brown, grey and purple, relatively gentle at first, run down to green valleys sheltering a few small houses. There are threads of water everywhere. Some scattered lakes appear, green as emeralds under the white glaciers that feed them. The Babusar Pass, almost the most westerly of the Himalaya passes,
is nearly 15,000 feet high, and the plane makes it with some 3,000 feet to spare, continues north for a few minutes and then, as the mountains close in above it, swerves north-east to follow the narrow Indus valley well below the cliff tops, banking and turning with the twists of the river in gorges so narrow that both port and starboard windows show nothing but rock apparently only a few feet from the wingtips. The snows of Nanga Parbat loom above, dominating the eastern sky, and ahead, beyond the rising steps of blue and then white mountains, at such a distance that they seem absurdly small, two Karakoram giants, Haramosh and Rakaposhi, jut their triangular peaks into the sky. At the last moment, when the green Gilgit River threads under the port wing and there is only a wall of rock ahead, the plane drops sharply right, skimming over a ridged plateau on which here and there, invisible from the valleys below, birch shrubs struggle out of the stony soil and tiny huddles of mud houses look down to their steep fields. Several more S-turns, the belly of the fuselage almost scraping the rocks on outlying spurs, and the plane is running along the Skardu basin throwing up great plumes of sand behind it. This flight and the flight to nearby Gilgit are probably the most dangerous as well as the most spectacular civil air routes in the world. Only a very few P.I.A. pilots are licensed to fly them; often, because of the weather, there are no flights for days, even weeks, on end.

Since air communications must always be uncertain the Government has recently built a road from Skardu following the Indus down to its most northern point at Sazli and then turning south with the river. The Gilgit River joins the Indus soon after Sazli and the road divides, one branch turning west up to Gilgit itself, the other continuing down the Indus. The gorges below Skardu are wild and frightening, even by Indus standards. Knight wrote: "The Indus here rushes between stupendous defiles, and for leagues at a time one sees nothing but almost perpendicular crags between the foaming water and the sky."

Before the new road was built a track of sorts led along the cliffs by the river, sometimes along galleries spider-webbed across the face of a precipice, sometimes up and down rough wooden ladders. One British officer struggled along much of it in his socks because his thick shoes could not be wedged into the toe-holds; at one point, traversing a corner, he found himself "all spread out upon the cliff like a beetle on a board, only far less secure for I had no pin through the middle of me to keep me there. I began almost to
envy the beetle the luxury of a pin. Many hundreds of feet below rushed the Indus'. A special hazard was the bridges. A Portuguese missionary wrote grimly:

From one mountain to the other two thick ropes of willow are stretched nearly four feet apart, to which are attached hanging loops of smaller ropes of willow about one foot and a half distant from one another. One must stretch out one's arms and hold fast to the thicker ropes while putting one foot after the other into the hanging loops to reach the opposite side.

The bridge swayed backwards and forwards high above the river and the unfortunate, crossing it, was dazzled and dizzied by the rush of water. A slightly different type of bridge was described with equal feeling by a British officer more than 200 years later:

Whenever the footpath along the river ran up against sheer rock the traveller had to get across to the other bank to carry on and the way of it was this; there were two ropes, the upper one for the hands, the lower one for the feet—far above was the sky, far below ran the Indus. A tight-rope dancer would have been quite all right, I suppose, but these ropes were not tight; they were slack and sometimes my hands went one way and my feet the other. If I were to live to be a hundred these crossings will come back to me in nightmares.

The suspension bridges that the road now uses are a rock of solidity compared to this, but they do sway and creak alarmingly as the jeep passes over them. Only a jeep can tackle the road, even now, and then only in four-wheel drive for practically the whole distance from Skardu to Gilgit; it is 120 miles and takes fourteen hours. Except in the rare stretches where it temporarily leaves the river to cross an upland, the track has been blasted out of solid rock, sometimes only a few feet above the river and sometimes many hundred feet up. It is only a few inches wider than the jeep. The angle of climb seems often to be more than forty-five degrees, the surface is either naked rock or shifting powdery sand on which the jeep skids and slithers. This road, it is hoped, will be open all the year round and will make a substantial difference to the economy of Skardu and of Baltistan generally. Certainly it is a great thing for Skardu to have some access to the outside world other than airflights but so long as the road is only capable of carrying jeeps and the journey is so slow, the quantity of goods transported in or out can only be very limited.

It is where the new road and the old trails run perilously above
the Indus between Skardu and Gilgit that the river reaches the end of its north-westerly gutter. The ‘insignificant stream’ that Hedin discovered in Tibet, now more than 500 miles from its source and 12,000 feet lower, is here a deep and implacable torrent. Suddenly, ahead of it, stand the tremendous ranges of the Hindu Kush and the high windy plateaux of the Pamirs. Northwards the wall of the Karakoram continues unbroken. South-east the Himalayas surge up to their last bastion at Nanga Parbat. Caught in the grip of three mountain systems the Indus swirls briefly to the north and west but there is no way out there. It must turn south.
THE BREAKTHROUGH
The Indus breaking through the mountains

- International boundaries
- Other boundaries
- U.N. Cease-Fire Line

Map showing the Indus River in the North-West Frontier Province of Pakistan, with major cities like Peshawar, Charsadda, and Lahore. The map also highlights the Khyber Pass and the Salient Range Hill.
Under the shadow of Nanga Parbat, the Naked Mountain, the Indus begins yet another battle with the mountains, this time almost the last. Younghusband saw the challenge here very clearly and knew which, in the long run, would win:

The river is a wonder . . . Compressed tight between the mountains, it flows swift and deep and strong. Before those mighty peaks were, it was. When they have dwindled to mere hills, it still will be. While the mountains stand over it in granitic immobility it courses forward with a power that nothing can resist for long. Centuries of milleniums pass, but without cease it flows. And so tremendous is its power it is almost terrifying to watch.¹

Powerful as it is the Indus has a hard struggle through the mountains. From Sazli to Kalabagh, where the river emerges at last on to the plains of the northern Punjab, is less than 300 miles, directly. Twisting and turning to find a way out, rushing down one ravine to throw its spray high up the cliffsides as they baulk it, foaming down the next in an altered direction, roaring angrily along the trough between the thrusting outlines of the Hindu Kush to the west and the huge wall of Nanga Parbat to the east, the Indus doubles the distance.

For a short moment before it is forced into this new gutter it can breathe, as in the amphitheatere of Skardu, and for the same reason; a great tributary has forced the mountains to stand back a little. Like the Shyok and the Shigar, the Gilgit River joins the Indus on its right bank after draining a long basin of high snows and glaciers. Except in the dead of winter the Indus is dark grey; in contrast the Gilgit comes in as bright and clear as jade. Their confluence is a Y, the Gilgit running down south-east into the new southerly run of the Indus, and spacious. A few trees grow by the rivers’ banks where the green waters meet the grey, but very few.

Higher up the Gilgit River, however, twenty miles before it joins the Indus, apples, walnuts, mulberries, apricots and chenars (the oriental planes) flourish in the steep sheltered valley. The
apricot, like the yak in Tibet, is almost endlessly useful in Gilgit; its fruit is good, both ripe in summer and dry in winter, and the kernel of its nut can be eaten like an almond or pressed for oil, or ground up to make flour for bread. Between the fruit orchards, climbing high up the valley walls, are sloping fields of wheat, barley, buckwheat and millet; lower down maize, potatoes, turnips, grapes, cherries and melons grow in fields whose dykes have been strengthened by the careful planting of Russian olives.

Life is by no means all work for the people of Gilgit. They grow good grapes in their valley and still make wine from them which they have a reputation for drinking. They hunt, once with hawks, and now with guns. Above all they play polo. Many regions in Central Asia and Afghanistan and Persia claim to have originated this game but in the steep valleys of the Indus it acquires a special flavour. The playing ground is usually long and narrow because of the lie of the land. The small ponies gallop madly from end to end, only half-controlled, anyone can join in, pipes and trumpets scream, and the whole village sits on the walls to clap and jeer. ‘A lively scene,’ as one British mountaineer drily observed. The game is exciting and risky for the players; in the nineteenth century it might even cause a diplomatic incident. In one of the small states west of Gilgit, Younghusband was obliged to play polo with the local teams. Somebody accidentally hit him over the head in the course of the game and knocked him out. Younghusband himself made light of the affair but the local ruler, no doubt anxious to keep in the good books of the British, arrived at his bedside with the unfortunate player who had hit him, in chains, followed by the state executioner with his sword drawn. ‘Say the word, Sahib,’ said the ruler, ‘and his wretched head shall fall.’ It took Younghusband some time to calm the situation.

Nobody seems to know much about the history of Gilgit, although it is an old place and long inhabited. A few Buddhist cliff sculptures, a Moslem shrine or two, a monument to the fighters at Partition are the only visible evidences of the past. The pale square houses, their flat roofs white with snow in winter, red or yellow with chilis or hay in summer, the rushing river, the men in their motley shirts, shawls, blankets and baggy trousers look today much as they must have looked for centuries. The things that have happened to the place and the people have left practically no mark. Animism, fire-worshipping
Zoroastrianism and a form of Hinduism all apparently flourished here before Buddhism was accepted over a hundred years before Christ was born. For many years Buddhist pilgrims from China journeying to their holy places in Kashmir and the Peshawar valley were given free passage across the mountains. There are stories of Alexander, or some of his army, marching through Gilgit, supported by the existence of a ruined stable alleged to have been built by the Greeks and the undeniable fact that the Gilgitis are on the whole lighter-skinned than the Indians. Around the thirteenth century Gilgit became Moslem but 600 years later an Englishman found an altar there covered with cedar boughs and was told that it was the village god's shrine where the women went to worship. "One felt the impulse," he commented, 'which brought the women there to offer their humble sacrifice to the living god of the stream and the hillside rather than turn to the cold deity of Mahomedanism, so essentially the god of men, and not for women.'

The consolidation of Sikh and Hindu power in Kashmir that was to result in Gilgit's subjection was still in the future when Moorcroft passed through but the Gilgitis apparently already feared the Kashmiris. The four peoples of the world, they told him, who were the Tibetans, the Kashmiris, themselves and the people to the north-west, were descended from four angels. When a man from Gilgit died he naturally expected to go to heaven. Unfortunately the gate of heaven was guarded by a Kashmiri who might very well refuse to admit him. Every Gilgit man must therefore arrive there with a bow and arrows, ready to fight for his admittance.

Once under the rule of the Maharajah of Kashmir the Gilgitis found no reason to change their ideas about Kashmiris. Although they were governed from a distance, their yoke was heavy. The British set up an Agency in Gilgit town in 1877 to protect the interests of the valley people against the Maharajahs, and also to watch for signs of Russian activity; four years later it was abolished, eight years later re-established. The post, one of the most beautiful stations in the world, was also one of the loneliest. Over the years a succession of British Agents recruited a small semi-military, semi-police force, the Gilgit Scouts, wearing the Black Watch tartan and boasting a pipe band, which maintained order in the area and defended it from attacks by its neighbours in Hunza and Nagar.

At Partition the newly arrived Hindu governor and the two
remaining junior British officers in the district who, in the
general confusion, and lacking communications, had used their
own common sense in accepting the clear determination of
Moslem Gilgit not to follow the Maharajah into India, found
themselves in custody surrounded by an almost medieval
courtesy. Warders and prisoners sat and talked together on the
green lawns of the Agency and watched polo. Most of the
Scouts disappeared eastwards to fight in Baltistan and Ladakh
leaving their pipe band in Gilgit. Later, when the Indian Air
Force began making small daily bombing attacks on Gilgit (an
almost impossibly difficult target, in its steep, high-crowned
valley) the band paraded at the time the planes might be expec-
ted to arrive and, as they swooped down, played at full throttle.
Enraged at being mocked the Indian pilots once came in low to
strafe the band; but one or two of the few machine-guns in Gilgit
had been placed precisely in the hope of such an attack. None of
the planes was in fact shot down, but the Gilgit Scouts band was
not attacked again.

Ten miles after the Gilgit River joins it from the west the
Indus receives another big tributary, the Astor, from the east.
Rising high in Kashmir, curving closely round the northern
flanks of Nanga Parbat, the Astor affords one of the best trails
from northern India north-west to Gilgit and on to China and
Russia. The linked valleys of the Astor, the Indus and the Gilgit
Rivers kept the town of Gilgit bustling with trade for centuries.
Today, since the trails north to China are open and have been
reinforced by a road, the Gilgit bazaar is much busier than the
bazaar at Skardu and offers a far wider variety of goods. Gossip
is exchanged as well as goods. With a deceptively placid air –
for the bargaining is hard-fought and the news is always exciting
in this last town before the Chinese border – men stroll along
the streets of the bazaar chatting to each other. Except in the
fields, there is hardly a woman to be seen.

On every side of the town the valley walls rise so steeply that
they almost lean over it. The grey slopes, purple-streaked, riven
by streams and crisscrossed with tracks, rise to sharp ridges
dipping occasionally to reveal distant heights as blue as lapis
lazuli. In this tangle of narrow valleys the highest mountains are
often hidden or dwarfed from below by their own foothills and the
townpeople of Gilgit cannot see their tallest neighbour of all,
Nanga Parbat, eighth highest mountain in the world and only
thirty miles away.
Downstream from Gilgit, Nanga Parbat can be seen occasionally. From the brief plain which the Gilgit River and the Indus make at their confluence 'the only thing of beauty is the view of the snowy ranges, and Nanga Parbat in the rising sun seen from the crossing of the Indus River to Gilgit sweeps into oblivion the dreadful desert of sands and rock'. A British official on his way to take up the post of Consul-General in Kashgar camped on a summer day on the same spot and saw Nanga Parbat clear above 'the mighty curves of the Indus gorges'. As the afternoon wore on: 'None of us had ever imagined, much less seen, so wondrous a picture of mountain beauty and majesty, and we could but gaze in silence while the virgin world of ice above the clouds glowed brighter and brighter with the gathering of the shadows below.' Stationed for some time on the mountains on the opposite side of the Indus, high enough to have the whole mountain in view, Bruce reacted rather differently: 'It gave one a feeling of impossibility, it gave one also the feeling that one wasn't there, and it also gave one a feeling that if one was there one didn't matter.'

Nanga Parbat is not a single peak but an enormous mass of rock ascending in successive ridges and cliffs to culminate in an ice crest 26,660 feet high. It is not only high and immensely bulky; it stands alone 'in solitary nobleness'. In a radius of sixty miles there is no peak that reaches to within 10,000 feet of its crest.

The planes from Rawalpindi to Skardu and Gilgit, flying up the Indus valley, take a long time to pass the mountain; a whole vertical country of white cliffs, fluted and serrated, of fretted glaciers pushing their ugly snouts down bare gullies, of black precipices and barren fields of tumbled rock slowly moves by the portholes.

Belittling everything below and around it Nanga Parbat has proved more cruel to man than any other mountain in the world. According to the ancient faiths, and like many other great peaks in the Himalayas and the Karakoram, it is protected by spirits of uncertain temper. Conway was told that the snowy peaks were inhabited by fairies: 'When the sun shines hotly it smokes up there, and that shows when the fairies are cooking their bread.' This sounds cosy enough but other beings who live on the mountain, still real to the peasants of today, are more alarming: demons and giant frogs, and snow snakes a hundred feet long.
Climbing the Himalayas and the Karakoram is very different from climbing the Alps, in kind as well as in degree. From the road or railhead the party must usually march for weeks before it reaches even the base of its mountain. It has to be sufficiently well-equipped to be independent for several months, for there are few villages, no trained guides and practically no support services of any kind. A company of porters must be engaged and somehow kept happy while they are performing hard and dangerous jobs. There is the extreme heat – and the extreme cold. The sheer height of the mountains is a personal enemy to each individual climber, not simply because it exhausts him to climb so far and for so long but because the lack of oxygen at altitudes above 20,000 feet or so weakens body and brain and spirit; reactions slow down dangerously, energy drains away, willpower flags. Even more essential than reliable material equipment, wrote Mrs Workman, ‘is a vast mental equipment of combined patience and combativeness’.  

The first party to attack Nanga Parbat, in 1895, consisted of three British mountaineers, Mummery, Hastings and Collie, each one already famous for ascents in the Alps and other mountains, and a number of Gurkha porters. For a short time Bruce climbed with them but his leave ran out and he had already gone back down the mountain before disaster struck. Mummery and two of the porters reached over 22,000 feet and then suddenly and unaccountably disappeared. In Gilgit everybody believed the Nanga Parbat fairies had spirited the foreign climbers away for their presumption. Collie himself thought his companions had probably been swept down by an avalanche. But nobody ever found out what had really happened to them.

Collie was a dedicated climber, not to be stopped by the tragic outcome of one expedition. The year after he went up Nanga Parbat with Mummery he was climbing in the Rockies. But sheer size and height were not what he most demanded of mountains. He enjoyed the technical difficulties of climbing on rock, ice and snow, and overcame them with splendid competence and confidence, and his special gift was an instinctive feeling for the topography of mountains. By looking at them, or even maps and photographs of them, he saw more quickly than anyone else whether a proposed route would ‘go’ or not. He spent a season with Bruce in the Alps and then in Skye, where Bruce’s best Gurkha climber astonished the local chieftain, Macleod of Macleod, by sprinting up a mountain in faster time
than his own ghillies' record. When he retired Collie went back to Skye and he died in the small village of Sligachan below the black and jagged crests of the Coolins.

The Mummery–Collie–Hastings expedition to Nanga Parbat set a sad precedent that was to be followed by no fewer than six other expeditions. For nearly forty years the mountain was left alone but in the 1930s five separate parties attacked it, all German, some with American or Austrian assistance; assailed by illness, blizzards and avalanches of snow and rock – a special hazard on Nanga Parbat – they all failed. In 1932 an expedition under the great German climber Willy Merkl was forced to withdraw after difficulties with porters and sickness had delayed it beyond the beginning of the monsoon season. In 1934 the advance party of another German expedition was caught in a blizzard high up the mountain; four Germans, including Merkl himself, and six Sherpas died in the struggle to get down.

The 1937 expedition, the fourth, was a particularly strong one and success looked to be within reach. Suddenly the whole climbing team of seven Germans and nine Sherpa porters was wiped out when their advance base was overwhelmed by a tremendous avalanche in the middle of the night. The following year's expedition found the tents, and nearly all the dead men lying inside as if they were asleep; all their watches had stopped at the same minute, 12.20. The next expedition, the fifth, was itself forced back down the mountain when the monsoon broke around and above it in a violence unusual even for Nanga Parbat. In 1939 a small group set out to reconnoitre the mountain once more; Heinrich Harrer was one of its members and believed they had in fact seen a possible new route up to the summit. It was when they were on their way back to Europe that the Second World War broke out and the party was caught and interned.

For eleven years Nanga Parbat was forgotten by mountaineers. But in 1950 three British officers planned to make a year-long trip to the Karakoram, western Tibet, and the Pakistan–Russian–Turkestan borders. They were accompanied by four Sherpas, one of whom was Tenzing Norgay who later made the first successful ascent of Everest with Sir Edmund Hillary. Most previous expeditions to the far north had had to march over the mountains from Kashmir to the Indus, and across to Gilgit, the last outpost of civilization in which to recruit porters and buy supplies. The journey might take as long as five weeks. In 1950, however, it was possible to fly to Gilgit in
a matter of hours. It was Tenzing’s first flight and he found it ‘an exciting experience ... we were at first impatient of being tied into our seats by belts, and as soon as we could loosen them we began hurrying about and peering out of all the windows’. The party started off northwards but had not got far before the Pakistani authorities, nervous of incidents near the Russian border, recalled it. The Karakoram was also forbidden. Back in Gilgit and baulked of their main objective the three soldiers decided to have a look at Nanga Parbat. A serious attempt to climb the mountain – for which in any case they were not equipped – would require advance permission but they could at least explore its base. ‘Gradually,’ Tenzing noticed, ‘there began to be talk ... that there might be a chance of climbing the mountain. Everything was against it, of course – the lack of permission, the smallness of our party, the terrible history of the peak; worst of all the fact that it was now already November and would soon be full winter. But once the idea entered the sahibs’ heads they could not quite get it out.’ Sharing the loads equally between the seven of them, the party went on and up. ‘Still the sahibs would not say right out that they would try to climb the mountain. They were doing scientific work, taking temperature recordings, studying snow and ice conditions. But always they wanted to go a little higher – a little higher.’ It was ‘craziness’, thought Tenzing. Winter blizzards were now upon them; it was appallingly cold. Finally the Sherpas, convinced they must inevitably die if they continued, refused to go further. The three Englishmen went on, the Sherpas returned to base came to wait for them. After six days one of the officers came back, his feet badly frost-bitten. Over several days they watched the other two climbing steadily higher; one evening they saw them pitching their tent at over eighteen thousand feet, the next morning it had disappeared. The third officer, with Tenzing and another Sherpa, made a desperate effort to climb the mountain but they were defeated by cold, newly fallen deep snow and exhaustion. The Gilgit Scouts dispatched a search party, the Pakistan Air Force sent a plane, but nothing more was seen of the two climbers.

By now a total of thirty-one men had died on Nanga Parbat; it had exacted a higher death-toll in proportion to the number of climbers that had attempted it than any other mountain. To mountaineers Nanga Parbat is not the Naked Mountain but the Killer Mountain. When he looked at it Tenzing saw ‘not only snow and ice ... but the ghosts of all those brave men. Even
on the clearest day, with the sun bright and the sky blue, a cloud seemed to move down from the heights and bring their coldness into our bones. It was a thing not of the eye or body, but of the mind. A cloud of fear. A cloud of death.' After all the expeditions that had been launched against the mountain 'it appeared it would never be conquered'.

But at last, in 1953, five weeks after Tenzing himself stood with Hillary on the summit of Everest, Nanga Parbat was 'conquered'. The expedition, German and Austrian, had flown from Rawalpindi to Gilgit, had been unable to obtain entry permits for Sherpa porters and forced to recruit Hunza men and had suffered from illness and bad weather. It looked as though the story of the previous seven expeditions was to be repeated. The assault party managed to establish itself high up the mountain but the monsoon broke suddenly and base camp ordered the climbers to come down. Unexpectedly the weather cleared and they refused. In an epic forty-hour-long struggle the Austrian climber Hermann Buhl struggled to the top of Nanga Parbat by himself, and back to the assault camp. It had been a quarrelsome expedition all along and while Buhl showed incredible bravery and fortitude his personal triumph was not altogether well received. But the purpose of the expedition had after all been achieved; moreover, this time Nanga Parbat had claimed no lives. The Killer Mountain and its protecting spirits had finally relented.

From far away, from the flowery mountain meadows of Kashmir sixty miles to the east, Nanga Parbat, incredibly high above its blue foothills, almost floating in the sky, looks too beautiful, too detached and too innocent to deserve either of its names. In the early mornings, wrote Younghusband 'to feast my eyes on Nanga Parbat was a perpetual delight. It was the very emblem of purity, dignity and repose. Day after day it would appear as a vision of soft pure white in a gauze-like haze of delicate blue. Too light and too ethereal for earth, but seemingly a part of heaven; a vision which was a religion in itself, which diffused its beauty throughout one's being, and evoked from it all that was most pure and lovely.' At sunset it was 'like a pearly island rising from an ocean of ruddy light'. But to the mountaineers who have come to grips with it it has certainly been a killer and to the people who live under the terrible bare precipices at its base, seldom seeing the snow-covered soft-seeming heights, it is indeed the Naked Mountain.
The western flanks of Nanga Parbat sweep down from over 26,000 feet to the trough of the Indus, at some 3,000 feet, in only fourteen miles. In ravines so deep that the sun can reach parts of them for only a few hours in the day, the river slices through the lower mountains. It is a place of enormous heights and cavernous depths 'very often infinitely ugly,' thought Bruce, 'though the ugliness is often impressive; but not even the prodigiousness of the peaks can make amends for the equally prodigious ugliness of the valleys . . . The view is huge and savage and one of the most impressive sights in the world - a desperate country.' It was 'the abomination of desolation: enormous, hideous and terrific'.

Almost everybody who has been there has had much the same feeling; it is inhuman, anti-human, a desert from another and crueller planet. Conway, who knew mountain country very well, wrote, 'I had never seen any valley that compared to it either in kind or in dimensions. It was barren as an Arabian wady; it was floored with the strewn ruin of countless floods, bleached and blasted by the suns of countless summers; it was walled along by rocky cliffs; a maze of precipices and gullies, untrodden by human foot, bare of vegetation and almost of debris.' Riding up it was 'like riding alone among the mountains of the moon . . . I felt no eagerness to climb these elemental lumps. No human being ever cared for them. No homestead ever timed its risings and restings by the pink sunlight on their crests. No tales were ever told about them. The naked skeleton of the world stood forth, with every stratum displayed and every mark of the sculpturing chisel undisguised.' One traveller writes of 'gaunt towering walls of rock'. To others the Indus seemed to be completely blocked by the vast mass of Nanga Parbat. In summer the valley was red-hot, said Bruce; and McCormick, painting it, found that his watercolours dried as soon as his brush touched the paper and had to soak paper and paints in a glacier stream.
Fierce winds blew along the river when the Workmans camped in this part of the Indus valley for the night and Dr Workman's tent was blown away in a flurry of sand, leaving him 'exposed to the fury of the storm' as Mrs Fanny puts it. She had naturally managed to keep her own tent anchored and was able to take a brisk view of her husband's dilemma: 'As the night was dark and it was impossible to light a lantern he had to make the best of the situation until daybreak.'

Collie echoes Conway's feeling. 'A wilder, grander, more desolate, and more colossal rift cannot occur elsewhere on the earth's surface.' From above, the Indus seemed an 'apparently slow-flowing and narrow river, as with silent but stealthy haste it twists and turns through the gigantic chasm at the base of Nanga Parbat'.

"The dominant sensation in this strange land [was] of fear and abhorrence; and what makes it all the more appalling is that this thing before one is there in all its nakedness; it has no reserve, there is nothing hidden. Its rugged insolence, its brutal savagery, and its utter disregard of all the puny efforts of man crushes out of the mind any idea that this spot belongs to any ordinary world... There, always there, is that monstrous flood below, slowly, ceaselessly moving. Occasionally the waters will send up an angry and deep-tongued murmur, when some huge eddy, rising to the surface, breaks, and belches out the waters that have come from the lowest depths."  

The country may be on a scale almost too big for man, but men do live here. At long intervals, as in Ladakh and Baltistan, narrow mud fans spill down cracks in the walls of the ravine and provide a sloping platform for a small bleak village; some of these hamlets never see the sun at all in the winter months, others are so scorched in summer that the inhabitants must migrate to the uplands. All of them are constantly menaced by avalanches, landslides and floods. After one bore had raced down the Indus in the 1830s, probably caused by the break-up of a glacier dam on the Shyok, a woman was picked up on a raft near Peshawar wearing sheepskins and speaking a language no one could understand; from her clothes she might have been a Balti, and if so she had been swept three hundred miles down the Indus and then up its tributary, the Kabul River – though this seems scarcely credible.

The worst disaster was in 1841. Before that there are said to
have been many more villages in the Indus valley between the junctions of the Astor and the Gilgit than exist today, and even a flourishing agriculture. Suddenly, in the winter of 1840, a whole mountainside, part of one of the foothills of Nanga Parbat near the confluence of the Astor and Indus Rivers, fell into the Indus gorge and dammed the river. So great is the volume of water in the Indus at this point that six months later a great lake had filled the valley, thirty-five miles long, reaching nearly to Gilgit town. Then the dam broke. Up here the people could see very well what was happening and had taken precautions so there was little loss of life, though miles of land were ruined and dozens of villages wiped out. But lower down the Indus people still speak of the terrible wave that poured out of the mountains without warning. This was only the worst of a long series of floods and bores caused by glaciers and landslides. In 1885, for example, the Gilgit River (or possibly its tributary the Hunza) was temporarily dammed; when the waters broke through the level of the Indus 300 miles downstream rose by ninety feet in one day. The British set up a system of observations that would at least give notice of floods. Today Pakistan aircraft watch the known danger spots and may even bomb an incipient glacier dam to break it up. Nothing can be done about major landslides such as the one in 1840, however, and the people of the valleys under Nanga Parbat, like the villagers on Mount Vesuvius, live at perpetual risk.

This, one might think, should draw them together, but the various hill tribes, divided by the great schism of Islam into apparently haphazard pockets of Shiahs and Sunnis, have for centuries concentrated on closing each other’s essential trails and, whenever possible, killing each other. One Sunni tribe, according to Knight, was ‘unanimous on one subject – the righteousness of cutting off the head of every Shia who falls into their hands’. Where the Shiahs were more powerful the Sunnis suffered correspondingly. On both sides of the Indus, between each rib of the mountains, the tribes smouldered with hatred for their neighbours, fought Moslems of a different persuasion and all non-believers to the death, and lost no opportunity of preying on anybody weaker than themselves.

At the place where the Astor joins the Indus they were for years able to give full rein to their appetite for preying on the weak, for this was where the convicts who had been driven westwards over the passes from Kashmir and down the Astor
valley by the Maharajah's soldiers were abandoned. Some of the European explorers and soldiers who followed the Astor Route—as did many of the Nanga Parbat expeditions—enjoyed the windy emptiness of the high passes and the wild flowers that star the lower valleys in spring. For the thousands of convicts exiled for ever from the mild and beautiful Vale of Kashmir by successive Maharajahs it was the dry and dusty road to slavery or death. They had been convicted often of quite trivial offences: one man, for example, was sentenced to exile because his cat had killed the Maharajah's parrot. Many died of exhaustion or starvation before they reached the Indus and perhaps they were the lucky ones. Those who struggled on were simply left in that desolate valley, without food or weapons, to fend for themselves. Then the tribesmen came down on them from the mountains and killed them or took them for their own slaves or sold them into slavery to the merchants from Central Asia.

Slavetrading is a very old commerce in this area. As early as the fourteenth century a Moslem traveller from Morocco noted that Hindu Kush 'means "Slayer of Indians", because the slave boys and girls who are brought from India die there in large numbers as a result of the extreme cold and the quantity of snow'.

Even to their own people the tribes are savage. The old and useless are not worth feeding and it is better for everybody else if they are got rid of. A British officer in the early twentieth century tracked down the meaning behind a local saying: 'the father's basket for the son'. When a man became too old to work, his son was supposed to carry him to a precipice above the Indus in a basket and tip him over. There is a legend attached to this saying, related to Alexander the Great. A young man was sadly carrying his father up the cliff in a basket when he heard the old man chuckling. He was remembering, he told his son, how he had taken his own father to the precipice and hurled him over, and now he laughed to think that 'in turn your son will put you to death. The father's basket is for the son, too.' Clearly such a brave and humorous father could not really be tipped over and his son hid him in a cave high above the Indus. Then Alexander arrived and asked for directions to the 'waters of life' which, he had heard, were somewhere near by. All the old men had been killed so nobody could tell him, but after consulting his father the young man gave Alexander the answer. 'How could he possibly have known?' asked Alexander. The father was finally produced.
'The custom of destroying the old people must stop at once,' said Alexander, for 'now I see that though courage and strength lies in the body of the young, knowledge and wisdom is to be found only in the heads that are grey.'\(^{10}\) The story goes that from that time on the old people were spared, although criminals were still thrown from the cliffs into the Indus. (When Alexander did reach the 'waters of life' he was disappointed. Two near-skeletons, a fox and a crow, told him they had drunk from the spring; it had indeed given them eternal life, but it had not given them eternal youth; both were now old and wretched, and wanted to die. So Alexander sensibly emptied his bottles of all the magical water that he had come so far to find.)

Another legend full of savagery and romance tells of a queen of Gilgit who poisoned her husband because he had killed all her seven brothers after a dispute over a game of polo. Her first son was born soon afterwards and, hating him because of his father's crimes, she put him in a box and floated him off down the river. The box drifted down the Gilgit, then down the Indus to the gorges of Chilas under Nanga Parbat, where it grounded. The child was found and cared for by some local peasants. Years later he went back to Gilgit and at his approach all the cocks crowed to announce the arrival of a king. The Queen sent for him, recognized him with joy as her son, and established him as the Rajah.

The ferocity of the tribes, even more than the desolation of their pitiless valleys, has kept them isolated from the rest of the world. To conquer these tribes, wrote a modern Kashmiri, 'was no easy task. They had forts built everywhere. Their army consisted of people who were proof against any kind of hardships. Today they were routed and tomorrow they would again make war and recapture the lost places. They never appeared on the battle field to kill or to die but like guerillas played "hide and seek" game. To fight such people was to do battle with the air or to give blows upon water.'\(^{11}\) On the whole, successive nominal overlords, the Mogul emperors of India, the Sikh-Hindu Maharajahs of Kashmir and the British administrators, discreetly left them to their own occupations of fighting and slave-trading.

In the 1870s, however, when the British discovered Russia pushing southwards into the Pamirs, Afghanistan intriguing with the tribes to the west of the Indus below Gilgit, and the Maharajah of Kashmir, supposedly their ally, secretly in touch
with both, they felt compelled to adopt a more active policy; moreover, British traders were pressing for the opening of a route through the Hindu Kush to Chinese Turkestan, which would be much shorter than the Ladakh Route. In spite of the fanatical hostility of the tribes the British gradually built up their maps of the country and extended their influence westwards across the Indus. In 1877 the Gilgit Agency was established but it was too small to exert any effective control, dangerously exposed and distant from its bases in Kashmir and northern India. In winter the passes were closed, in summer all supplies had to be ferried across the raging Indus. 'The military weakness of Kashmir at Gilgit was pathetic. The proper complement of the Gilgit garrison was one Kashmir infantry regiment at Gilgit and Skardu and two at Astor, but they were almost always gravely under strength.' In 1880, when the tribesmen along the Indus rose in their thousands, the total force at Gilgit consisted of 750 men. Only the unexpected support of two chief-tains, in furtherance of their own ambitions, not from any feelings of loyalty to the British or to Kashmir, saved the garrison. In 1881 the Agency was closed down and dealings with the frontier tribes were once more left to the Maharajah of Kashmir.

In Kashmir the British strengthened their influence by appointing a permanent Resident and gradually some improvements were introduced in the Kashmiri Army to increase its capacity for defending the frontiers. Afghan and Russian intrigues continued. In 1878 the Russians actually marched troops down to the Hindu Kush; the threat may have been exaggerated in India but it undoubtedly existed and its pressure steadily increased. China could not be left out of account as it exercised a degree of suzerainty over the province north of Gilgit. The attitude of the tribes was of vital importance since they commanded the north-western reaches of the Indus and the Hindu Kush passes beyond it.

In 1889 the Gilgit Agency was re-established and Algernon Durand took up the post of British Agent. He was the younger brother of Mortimer Durand, then India's Foreign Secretary, and had already travelled over much of the country which he was now, in some sense, responsible for; it included Baltistan, Gilgit and the provinces to the north and west of it, and about a hundred miles of the Indus valley below Gilgit, where the river runs round the steep slopes of Nanga Parbat. He was a soldier, an administrator and a diplomat rather than a mountaineer. He had
a very clear eye for nature, however, and his book is full of vivid and knowledgeable descriptions of rocks, trees and flowers. He was also quite sufficiently tough to cope with his endlessly turbulent tribes, whom he admired for their courage, dash and enterprise, and with the dangers of the country itself. One of his photographs, showing an appalling precipice narrowly ledged with a litter of boulders, is entitled simply ‘A Bad Bit of Road’. But even Algernon Durand was impressed with the southern part of his manor: ‘the further I went down the Indus valley the less I liked it . . . the road was awful, even for the Hindu Kush; it ran along the face of precipices a thousand feet above the river, plunged down into great ravines with perpendicular conglomerate slides hundreds of feet high’.13

Younghusband was probing to the north, investigating the passes, meeting Russian explorers and soldiers, deliberately misleading them out of their way as best he could and defeating their efforts to delay his own return when he was ordered out. Another mission under George Robertson, an Orcadian on both sides, an Indian Medical Service doctor who had transferred to the Indian Foreign Office, was conducting a reconnaissance in the west. The Gilgit garrison was strengthened by thirteen British officers, 200 Gurkhas and some mountain guns; even so Durand, with Knight and Surgeon-Major Robertson, had a hard fight to subdue a tribal rising in the north in 1891. When they ran out of conventional missiles they used bullets made of garnets enclosed in lead.

Durand, wounded in this campaign, returned to his green-lawned tree-shaded bungalow at Gilgit only to find himself facing another crisis, this time in the south, and a more dangerous one. Knight had described the Chilas area as unexplored, though Chilas town must have been known to many travellers for hundreds of years because it served as one of the main staging posts on the ancient caravan trail leading from India over the Babusar Pass, across the Indus and on to Gilgit. Of the few villages here it is one of the pleasantest, sitting on a spur high above the east bank of the river, well watered and green with fruit-trees; even bamboo grows in Chilas for by now the Indus is beginning to run into monsoon country. But the inhabitants of this pleasant place made a regular practice of raiding their neighbours in the village of Gor, on the other side of the Indus. Presumably in the hope of obtaining some benefit from the presence of foreigners, Gor now asked Durand for protection.
Robertson marched down from Gilgit with a small force to deal with this problem; the Indus tribes rose behind him and he was rescued only with difficulty, leaving a Kashmiri garrison in Chilas. For a few months the 'abomination of desolation' under Nanga Parbat was at peace. Robertson was quite clear that: 'Chilas is our sheet anchor. It protects... our supplies, bridges and roads.'

But Chilas turned out to be more of a storm centre than any sort of anchor. In the spring of 1893 the surrounding tribes attacked the garrison fort in strength and Robertson and Bruce found themselves fighting a small savage war against assailants from all sides. The various skirmishes were fierce and on both sides men fought heroically. Of the bravery of the tribesmen, wrote Younghusband, it is 'difficult to speak too highly'. A chieftain leading an advance would charge on to his own certain death even after his men had been shot down behind him. Those who were wounded by sword or bullet stood the pain 'infinitely better than Europeans can'. There were no 'medical appliances' for the wounded of either side. 'Bandages, crutches and splints had to be improvised, and the officers used a weak solution of carbolic and carbolic toothpowder for the purpose of dressing the wounds.' Like Robertson, another doctor, Surgeon-Captain Whitchurch, found himself fighting as well as dressing wounds; he spent a whole night rescuing a fellow officer, alternately giving him medical aid and fighting off new attacks as he dragged him back to camp. At the very last moment the wounded man was shot for the third time, this time in the face, and he died next day.

Crossing the Indus had until recently been possible only by ferry boats, very dangerous in the summer floods; now Captain Aylmer of the Royal Engineers constructed 'a flying bridge' consisting of a strong wire high above the river along which boats big enough to carry animals and military supplies could pull themselves across by using the force of the current against their rudders. But the bridge was above Chilas, and lower down enemies on the two sides of the Indus still had to use bullock-skin rafts to get at each other. From Gor, on the west bank, Bruce sent raiding parties over to Chilas. One of them started out with four of his Gurkhas swimming under a raft, their arms and equipment lashed on top; only one man survived. 'So bad was the road up the Indus valley that it was some months before the wounded could be evacuated.' In the winter, still standing by
at Gor, Bruce, having been provisioned for months mainly with some very hard grain 'like bird’s seed', cheerfully robbed the Christmas consignment to other outposts on the river: 'When one has only bird’s seed to eat plum pudding is irresistible.'

With more modern weapons, and facing a conglomerate of enemies whose determination to pursue fratricidal quarrels often lost them the advantage of local knowledge, the British eventually succeeded in subduing the tribes. Always aiming at a northern quarantine belt for the protection of India, they then tried to establish a degree of order. Reliable communications were clearly essential. Already in the 1880s the first telegraph line had been set up between Kashmir and Gilgit; to the Gilgit Agency it can have given only an illusion of being in touch with base since—because of winds or snow or tribal knives—it was very often out of order. The greatest need was better roads.

For more than a thousand years there has been some sort of a path down the Indus: but a terrifying one. Fa Hian, a Chinese Buddhist who made the long and dangerous pilgrimage to the sacred Buddhist places of Kashmir and the Peshawar valley about the end of the fourth century, reported: 'The road is difficult and broken with steep crags and precipices in the way. The mountainside is simply a stone wall standing up ten thousand feet. Looking down, the sight is confused and there is no sure foothold. Below is a river called Sintu-ho [Indus]. In old days men bored through the walls to make a way, and spread out side ladders; of which there are seven hundred in all to pass. Having passed the ladders, we proceed by a hanging rope bridge to cross the river.' But in the centuries after Fa Hian’s pilgrimage traders and slavers mostly used the Indus tributary valleys for communications, here running roughly north and south, rather than the Indus itself. Foaming westwards across the trails the Indus was simply an obstacle to be crossed and the lines of politics and trade had to struggle over it. Once the area was relatively quiet the British made an effort to improve the ancient trans-Indus trails between Kashmir and Gilgit and their offshoots to north and west, and the path over the Babusar Pass from Kashmir to Chilas. Captain Aylmer followed up his 'flying bridge' with a slightly more solid structure, a 'four-foot-wide suspension bridge of telegraph wire' and 'for the first time in the history of the mighty river its upper reaches had been spanned by a bridge over which men, if they dared, could ride, and across which laden baggage animals could pass'.
But at Partition the Indus route itself became vitally important to Pakistan not only because it opens a road to the north without passing through Indian territory (though this was perhaps the most important reason) but also because it affords a passage through the northern tribal countries which, the new Government hoped, could be induced to become loyal provinces; for even today Pakistan deals very gingerly with the people on both sides of this stretch of the Indus. Desperately difficult though it would certainly be to construct, a road along the Indus might help to tie Western Pakistan together.

The road was completed in 1968. It is a tremendous feat of engineering. From the Gilgit River junction it follows the right bank of the Indus; just below the Astor it crosses to the other side and continues down the old caravan trails under the shadow of Nanga Parbat. A hundred miles downstream, following the twisting southerly line the Indus can now take, it crosses back to run along ledges of naked rock high above the river. Where the cliffs were practically perpendicular men had to be lowered from above to drive wedges into the rock on which beams could be balanced; bit by bit a narrow ledge was cantilevered outwards over the Indus. In other places a passage had to be cleared by dynamite. The cost of building the road, in terms of money, effort and lives, is incalculable. It connects with the road the Chinese have built south towards Gilgit and its main purpose may be military, but like the Skardu–Gilgit road it is expected to benefit the Indus villages by providing, for the first time in their history, an all-weather link with the outer world.

It is still a tenuous link. The surface of the road is unmetalled and much of it is wide enough only for one small jeep. Landslides are common everywhere, maintenance and communications are extremely difficult. Anybody travelling on this road must be very sure that his jeep is in good order and that he has with him everything that he might possibly need in the way of extra petrol, spare parts, tools, food and water since the villages are few and far between and can offer few facilities. A Pakistani who drove along it soon after the road was opened, a Pathan well accustomed to mountain roads, admitted that the experienced ‘several occasions for deep worry and nervous tension’.

A hundred miles or so below Chilas the road turns west and crosses a pass into the Vale of Peshawar. But the Indus continues southwards, twisting down another fifty miles of deep narrow gut between the Hindu Kush and the Black Mountains.
Only some 9,000 feet high, the mountains that wall the gorges are here only a third of the height of Nanga Parbat; their precipitous slopes, still subjected to the disintegrating effect of extreme heat and cold, and now exposed to the danger of the monsoon, are still dangerous.

From May to October the wind blows from the south-west in the Arabian Sea. Huge grey clouds pile up; ponderously they move inland over the Indian subcontinent; in tropical rainstorms they unload some of their burden near the coast and then, lighter and higher, ride on unchecked until they reach the towering ranges of the Himalayas and break in a fury of wind, snow and rain. Every runnel of water becomes a stream, every stream a raging torrent, and rocks and mud cascade down the mountain sides. If the summer-melt of the high glaciers is still flowing when the monsoon clouds arrive – and this happens every few years – the Indus, fed by a thousand cataracts, surges up its banks and throws spray high up on the overhanging cliffs.

This part of the river is perhaps the least known of all its many and varied reaches. Few caravan trails cross the Indus here; even the new road turns away from it. The rare villages huddle into cracks in the hills, like animals seeking shelter. Only close to them are there any trees or green things. Behind and beyond for miles and miles stretch the gaunt grey mountains. Far below, the wild river rushes endlessly past. The country looks both primeval and eternal and it seems that nothing could ever change it. But if Pakistan’s ambitions are fulfilled things will change here, fundamentally, and quite soon.
A short distance north of a small left-bank village called Tarbela the Indus breaks out of the mountains onto the Potwar Plateau. This is a wide and windy space of sand and rock carved into innumerable gullies by the monsoon rains, lying between one and two thousand feet above sea-level. To the north the great mountains still ring the distant horizon but to the east the plateau merges into the Indo-Gangetic plain stretching across northern India as far as Calcutta, and to the west the valley of the Kabul River drives a wedge into the mountains of Afghanistan. The land is russet and straw-coloured, patched with the green of rough grass and tamarisk trees, wide open to sun and wind. Here, temporarily, the Indus can spread itself.

In winter it wanders in a dozen shallow channels across the plateau, very blue between pale shoals of sand and mud and pebbles. Level with Tarbela a long midstream island a mile wide rises only a few feet above the water, scattered with granite stones veined and mottled in green and grey and red, water-worn as smooth as birds’ eggs. Its sands are hoof-marked and rutted with cart wheels for it is linked to both banks of the river by files of heavy narrow boats lying side to side, each separately anchored with stones against the current, and over the mud-and-straw-covered planks laid across their holds and between each boat and its neighbour, and over the island, passes a steady trickle of peasants and donkeys, camel trains and carts. In spring, when the river begins to rise the boats of the bridges are separated and pulled up on the shore. In April and May the Indus takes possession of its whole wide bed, three miles from east to west. The islands and shoals disappear beneath a hissing cataract of grey waters; running waves bite into the banks; and if there is any wind the air whitens with a dry sand as fine as powder.

A few years ago Tarbela was half forgotten, hardly visited, a sleepy little place where the humpbacked cows, endlessly
circling, turned creaking wheels to raise buckets of water, where
the women carried round-bellied pitchers down to the Indus on
their heads and small boys splashed in the always-icy river.
Today Tarbela is transformed, for this is where the biggest dam
in the world is being built.

At Partition the irrigation pattern of the lower Indus and its
tributaries, designed by the British to serve a united subconti-
nent, was split into two.* West Pakistan, made aware by India,
quickly and painfully of its vulnerability, realized that if it
could not obtain sufficient water under its own control it might
easily wither of drought in a very short time. Almost all its im-
portant rivers, even the Indus, run from, or partly through,
India. But the Indus, greatest of them all in terms of water-
volume, is also the most unassailable because its brief passage
through Indian Ladakh is protected from any significant diver-
sion to Indian territory by the Himalayas. If the upper Indus
could be dammed to form a reservoir once it was well within
Pakistan territory, West Pakistan might breathe more easily.

To choose the site of the dam was the first problem. The
Skardu basin was considered; it has the advantage that the Indus
is still relatively clear of sediment here but as the centre of a
project requiring the transport of heavy machinery and thousands
of workers, and all the subsequent maintenance necessary later,
Skardu was judged to be impossibly remote. Downstream of
Tarbela, in the last narrows of the Indus, there were at least
two places where a dam might be built, but very large areas of
rich and cultivated land would have had to be sacrificed. By 1952
an international group of engineers was prospecting the Indus
valley above Tarbela. ‘We hardly travelled three miles,’ wrote
a senior Pakistani engineer, ‘when a volley of bullets was fired
in the air by the tribesmen from the opposite bank as a warning
against further advance. This aspect of the Indus had not been
reckoned before. The party retreated.’¹

But investigations continued. American and British engi-
eering consultant firms were brought in for advice. Individually,
and collectively through the World Bank, the foreign govern-
ments who had agreed to put up most of the money needed to be
convinced that the dam was going to be constructed in the right
place. In the end and after studying the problem for fourteen
years, the geologists, hydrologists, economists and engineers

*The Indus irrigation system and the changes enjoined by Partition are
described in Chapter 18.
reached the conclusion that the only practicable site was immediately downstream of the last great mountains. The Tarbela area, unlike Skardu, was easily accessible from the northern centres of Pakistan: only forty miles from Rawalpindi, for example. As against the downstream sites, a reservoir above Tarbela designed to fill the river gorges would drown relatively little good agricultural land, at least to begin with.

The Tarbela site, however, had one great disadvantage; by the time the Indus arrives here its rushing waters are dense with an enormous load of silt and sediment. The process that converts rocks into the suspended particles that clog rivers has been described dramatically by the Chief Engineer of the Indus Basin Project.

Sun, frost, moisture and wind contending among the mountain tops, split off immense fragments of hardest rock from the massive bulwarks. Gravity seizes them within its grasp. They are dislodged from their places, they slide, they roll, they bound through the air with ever-increasing velocity and plunge downward in wild career, the avalanche of rocks, scouring and pulverising the mountain sides, sending up clouds of snow and rock dust till they find a resting place . . . Under the action of heat, cold, moisture, wind, the avalanche and the glacier, mountains are ground to powder. The ponderous mixture of solid and semi-solid bodies move and with all the freedom and facility of a liquid, but with greater devastating power. The rock-packed banks of the river crumble into the rushing torrent and large boulders topple into it and join the mad procession.2

When a river is stopped or slowed it lets its sediment fall to the bottom; gradually its bed inches upwards. Estimates of the probable annual deposit from the Indus in a Tarbela dam varied widely; the most pessimistic were finally accepted as likely to be the most realistic. The reservoir would probably be so full of silt as to make it almost useless within anything from forty to seventy years, though its life could possibly be prolonged by the construction of ancillary reservoirs.

In 1968 all the various bodies concerned at last reached an agreement: the dam was to be built across the valley about six miles below Tarbela. Nobody pretends that the location is ideal but on balance it was thought to be the best place there is. To build this dam is to change a part of the structure of the world. About two thirds of the quantity of earth dug out of the Isthmus of Panama when the Panama Canal was first built will have to be piled up to make the main wall of the dam, a great ridge nearly
two miles long and rising some 500 feet above the river bed. It will require 186 million cubic yards of rock and earth, of which about half will come from the excavations for associated tunnels and spillways and the rest from quarries elsewhere, and over three million cubic yards of concrete. Above the dam the Indus, ponded back for fifty miles to a place where its gorge is less than a hundred yards wide, will hold more than 11 million acre-feet of water. At flood seasons, or when the level of the lake has risen because of monsoon rains or the breaking of glacier dams, side channels will carry the excess water back into the traditional channels below the dam.

It is of course in its effects on the sandy plains downriver that the Tarbela Dam is expected to prove worthwhile. The waters it will hold and control for irrigation, and the electrical power it will generate, should be to the great benefit of the Punjab and Sind, if the problems associated with irrigation in the desert, waterlogging and salinity, can be solved. In the immediate vicinity of the dam, however, the changes in the lives of the people, as tremendous as in the countryside itself, will by no means all be welcomed.

The reservoir will extend back into bare mountains. But even here there are fields and pastures and villages in the valleys. One hundred thousand acres of cultivated land and about a hundred villages are to be drowned. Nearly 80,000 people will have to be compensated and re-settled elsewhere. To work out the terms of compensation was a most complicated task. As one Pakistani writer put it:

There are several grades of land and landowners. There are irrigated lands and there are non-irrigated lands; there are landowners and there are landless farm hands; there are big landowners and there are small land-owning farmers. Each category has to be treated on a different level for the purpose of working out the size of compensation. Then, there are properties other than farmlands. There are homes of all kinds and sizes. There are trees, ponds, cattlesheds, shops and workshops of professional workers, like the carpenter, the blacksmith, the cobbler, the grocer and what not. These, too, have to be duly compensated. Each tree’s value and compensation has to be worked out.  

The arrangements finally determined seem liberal. A small farmer owning half an acre, for example, is entitled to twelve and a half acres of well-watered land further down the Indus on easy repayment terms. Peasants owning less land are given cash. But nothing can really compensate the peasant for having to abandon
9. Sir Francis Younghusband *(top left)*

10. Isabella Bird Bishop *(top right)*

11. Sir Martin Conway *(above left)*

12. Dr W.H. Workman *(above right)*

13. Mrs Fanny Bullock Workman *(right)*
14. Kashmir

15. Men and skin floats used in the valley of the Sutlej: pencil drawing by F. de Fabeck
16. The site of the Tarbela Dam

17. Akbar praying on the banks of the Indus while proceeding upriver in 1572. Mogul painting by the artists
18. Bridge of boats from Khairabad to Attock, c. 1880

19. Gandhara relief: the death of Buddha
his ancestral village and make a new life far away. In recent years, moreover, improved methods of agriculture and the increased use of fertilizers had begun to result in better crops: naturally a farmer hates to leave good earth that he knows for strange country. Of the people who received cash compensation the then President of Pakistan said: 'I very much hope that the persons who received their compensation, which has by no means been ungenerous, would not fritter away their money but would invest it in fruitful pursuits.' Unfortunately many, being human, did indeed 'fritter away their money' and are now destitute.

The contract for building the dam, at an estimated cost of 623 million U.S. dollars, was awarded to an Italian–French consortium sponsored by Impregilo of Milan. A railway and a wide road were built across the uneven sands over scores of bridges and culverts to connect Tarbela to the Grand Trunk Road twenty miles to the south. By the end of 1968 the first villages were already being evacuated to provide working space for the early stages of construction. A few months later a heavy-duty bridge was thrown across the Indus near Tarbela to link the future operations on the two sides of the river.

The dam is expected to take 9,000 men at least eight years to build. They will obviously need houses, offices, schools, shops and hospitals. While the bridge was under way, Pakistan had already started to make a new town out of Tarbela. For a time the village was an extraordinary mixture of ancient and modern, of mudbrick cottages and concrete bungalows, of Persian water-wheels and electrical installations, of nomads grazing their flocks of sheep and goats near lines of jeeps and bulldozers. Surrounded with barbed wire, empty spaces bore large notices: 'Site of Headquarters, Electrical Engineer', 'Site of Hydrological Surveyor'. Although by far the largest proportion of those engaged on the construction of the dam will be Pakistanis, not only as labourers but also as skilled technicians and engineers, there will also be about 600 French and Italian experts in different fields, many of them accompanied by their families. The town planners had to take into account the future demands for schools and churches for the foreigners.

Even allowed their own Catholic churches the Europeans may never be able to feel at home in country so bare and rugged, and a climate which is tolerable to most northerners for only three or four months in the winter. Many of the basic staples of their
diet are unobtainable locally. Inevitably there will be a continual language problem. But people are almost infinitely adaptable, and after all the British managed to live in north-west India, and make homes and bring up children, for a hundred years. Indeed there is already an Italian tradition here. During the construction of another dam in the area for which Italians were engaged, the chief Pakistani engineer was surprised to find that after a year his local labourers were speaking fluent Italian. The Italian engineers explained that it was easier to teach them Italian than to learn the native language themselves. As for food, the Italians were making spaghetti and macaroni, a palatable wine was fermented from local grapes, and even ham and salami, utter anathema to a true Moslem but essential to the Italian table, were produced by home-curing the meat of wild boars. La caccia was being pursued as enthusiastically on the Potwar Plateau as in the leafy woods of Italy. At Tarbela the Italians will certainly hunt, and make wine; their French colleagues will no doubt comment on the inferiority of Italian Tarbela vintages compared with their own.

When the foreigners have gone home, and even most of the Pakistanis have moved to other work elsewhere in their own country – before 1980 if the original schedule can be followed – Tarbela will be left to the comparatively small number of engineers required for the maintenance and operation of the great dam. The young trees now being planted along the streets of the town will have grown enough to give shade against the fierce summer suns. The Catholic churches will fall into disrepair. The Pakistanis will forget their Italian. Far down the river the peasants will have more water for their fields, better controlled in timing as well as in volume, and on the long narrow lake above Tarbela tourists may one day play at fishing and sailing.

The dam that will then stand across the Indus, the bridle in the Lion’s mouth, will be the largest of its kind in the world, three times bigger in volume that the High Aswan dam on the Nile and over a hundred feet higher. From downstream, where the ancient villages have seen innumerable invaders cross the Indus into India, it will look like a giant wall across the river.
In the summer of 1841 the Indus below Tarbela, normally in spate at that season, was running very low, for it had been blocked six months earlier and 250 miles further up by the landslides from the foothills of Nanga Parbat. A contemporary account written from Peshawar on 12 June 1841 to the editor of the Civil and Military Gazette gives the facts:

You will probably have heard a report that was prevalent here about six months ago of the course of the Indus in the mountains above Attock having been interrupted. Little credit was attached to this report at the time, although everyone accustomed to view the Indus admitted that the volume of water it discharged had become sensibly less, and was diminishing daily. Within the last few days, we have had a fearful corroboration of the course of the river having been interrupted in the devastation it caused, then again, with sudden violence, opening the road for itself. All the country... within ten miles of Peshawar itself, has been overflowed. Some twenty villages as far as we yet know, together with [four] towns... have been completely swept away by the deluge, and the loss in human life has been frightful. All who stopped to attempt to save their property and in some cases, their families, fell sacrifice.¹

A force of Sikh soldiers had halted close beside the Indus that June. 'At two in the afternoon, the waters were seen by those who were there encamped to be coming upon them, down the various channels, and to be swelling out of these to overspread the plain in a dark, muddy mass which swept everything before it. The camp was completely overwhelmed; 500 soldiers at once perished... trees and houses... were swept away; every trace of civilisation was effaced.'² The local people said: 'As an old woman with a wet cloth sweeps away an army of ants, so the river swept away the Army of the Maharajah.'³

These Sikhs may have been the only soldiers to be drowned so suddenly, as a unit, on this stretch of the Indus. Before them, and after them, however, hundreds and thousands of soldiers from a
dozen different countries have died here fording the river, or in battle. For the Potwar Plateau is where the oldest and most important roads from the west into northern India cross the Indus.

Once it was thickly forested and marshy, inhabited by elephants, rhinoceros, lions and tigers. Today the climate and the country are mostly dry. The winters are cold, clear and sunny. The summers are long and very hot and every plant shrivels to the sandy colour and texture of the earth it grows in: 'You could lift the heat with your hands, it sat on your shoulders like a knapsack, it rested on your head like a nightmare.' It is scoured and wrinkled and centuries of its history have been lost or forgotten or overlaid. Stone implements and weapons chiselled 400,000 years ago have been found here. After the Stone Age only an occasional gleam of knowledge lights the darkness of prehistory. Archaeologists have discovered the remains of cities apparently linked by trade west to Persia and the Mediterranean, east to India and south to the lower Indus and the Arabian Sea, built at least 1,000 years before Christ was born. Pakistan now claims that in this region history has been 'pushed back by two thousand years' to 2500–2000 BC with the excavation of still older settlements near the river. Around 1500 BC a vast concourse of tribes from Central Asia, the Aryans, descended onto the Indus valley and forced their way southwards down the river, and east across the subcontinent to the Ganges. Early Greek and Roman historians, acquiring their material at fourth or fifth hand, tell of Egyptians and Assyrians in India. The wine-god Bacchus (or Dionysus or Osiris) is said to have pushed as far east as the Ganges, stayed for three years, and left monuments now untraceable. There is a story that Semiramis, a half-mythical queen of the Assyrians, invaded India in the ninth century BC; near the Indus she used dummy elephants made of elephant hides stuffed with straw and mounted on camels to frighten her enemies but her trick was soon exposed and most of her army, and possibly she herself, leading it in battle, perished beside the river. The Indians' own records are an inextricable tangle of legend and fact. 'Indians in the past,' wrote Pandit Nehru, 'were not historians. Indians are peculiarly liable to accept tradition and report as history, uncritically and without sufficient examination.' Al-Biruni, a Central Asian scholar brought to India in the eleventh century by the Moslems, wrote: 'Unfortunately the Hindus do not pay much attention to the historical
order of things . . . when they are pressed for information and are at a loss, not knowing what to say, they invariably take to tale-telling.'

Not until 1,000 years after the Aryan invasion, when the Persian Empire under Cyrus expanded eastwards over the Hindu Kush, does the central Indus begin to come into focus, for the Persians inscribed columns and rocks in a language that can still be understood and recorded figures and facts. Cyrus is known to have imposed tribute from the peoples he had conquered in Afghanistan; he also improved the ancient trade routes on which much of their prosperity depended. Camel caravans had ridden between India and Persia for as long as anyone could remember, but always at a risk of life and luggage; now the road was kept open, protected and provisioned. His successor, Darius, extended Persian dominion right up to the Indus, and the Valley of Peshawar and of the Indus's tributary the Kabul River, as Gandhara, became one of his eastern provinces. Darius determined to find out where the Indus reached the sea and about 510 BC commissioned a Greek, Scylax, to explore its course. In the fifth century the Persians began to recruit tribesmen from 'India' – which then meant the country near the Indus – to strengthen their armies against the new and growing menace of the Greeks; but even with their help the Persians could not hold the Greeks back. By the fourth century the struggle was over, and Alexander of Macedon ruled the empire that had once been Darius's.

Alexander's impact on India is assessed very differently by different experts. An Indian historian says flatly, 'The Greek campaign in north-western India lasted for about two years. It made no impression historically or politically on India, and not even a mention of Alexander is to be found in any older Indian sources. It seems that the Greeks departed as fast as they came.'8 A British archaeologist strongly disagrees: 'His intervention in Central Asia was a matter of months, but its political and cultural consequences were stupendous. Its sequels were revolutions indeed. Politically it led in the north to an awakening of Indian nationalism on an unprecedented scale. Culturally it laid the foundations of much that was to become widely characteristic of Indian architecture and sculpture.'9 A modern Pakistani thinks that Alexander 'rose like a storm and conquered the world in the twinkling of an eye. Still his invasion did not affect the political life in the Indo-Pakistan subcontinent so much as it brought a tremendous revolution in culture, civilization and religion.'10 A
British historian, writing of Alexander's 'splendid but transitory raid' across the Indus, considers that he made no permanent impact on the region.\textsuperscript{11}

But Alexander personally is still remembered near the Indus, as a great warrior, as a great ruler. More than 2,000 years after he arrived there an English administrator was told by tribal elders that the Indus was 'an Alexandrian boundary', not in the sense that Alexander had made it a frontier but because its strength and power, like his, were irresistible.\textsuperscript{12} In 327 BC, with eight years of glittering triumph behind him, Emperor of Greece, Asia Minor, Syria, Egypt and Persia, he marched eastwards from Afghanistan into India.

A hundred miles before the Indus he divided his army into two columns; one followed the east-running tributary, the Kabul River, the other swung to the north. The tribes whose territory he was invading knew how to wage guerrilla war, but Alexander had been brought up in a school as tough as theirs. After incessant fighting and then a series of pitched battles Alexander's two columns rejoined forces and reached the Indus. On the east bank of the river lay the kingdom of Taxila, whose king Taxiles was 'a man of great prudence' according to Plutarch. He had heard of Alexander's victorious advance and now crossed the river to meet him

and after the first compliments thus addressed him: 'What occasion is there for wars between you and me, if you are not come to take from us our water and other necessities of life, the only things that reasonable men will take up arms for? As to gold and silver, and other possessions, if I am richer than you, I am willing to oblige you with a part; if I am poorer, I have no objection to sharing in your bounty.' Charmed with his frankness, Alexander took his hand and answered: 'Think you, then, with all this civility, to escape without a conflict? You are much deceived if you do. I will dispute it with you to the last, but it shall be in favours and benefits; for I will not have you to exceed me in generosity.'\textsuperscript{13}

They duly gave each other rich presents, and Taxiles left well pleased, having agreed to prepare a bridge of boats over the Indus for Alexander's passage, at Ohind. In his play about Alexander in India Racine, relying on Roman historians, allows the Greek Emperor a brief but passionate love-affair with the sister of Taxiles, whom he is alleged to have first defeated and then, for her beauty, re-established in her domains; she is supposed to have had a son by him, whom she named Alexander.
Ohind's precise location is a subject for conjecture between historians; in any case different units of Alexander's army may have crossed the Indus at different places. But the people of Hund, a right-bank village twenty miles below Tarbela, are to this day quite certain that Alexander crossed the Indus from their village. 'Sikander', the local version of Alexander, is a familiar name in Hund and so much part of a living local tradition that even the youngest boys know that he passed their way.

It is a small village, Hund, four miles down a dusty track from the village of Lahor (which some historians believe to be the origin of the name of the capital of the Punjab); irrigation channels cross the track at frequent intervals; red and gritty sand laps up to the foot of its thick walls. Inside the gate cobbled paths lead between crowded houses; from behind their screened windows and balconies dark eyes watch every passer in the road; there are half-seen flashes of movement and half-heard whispers and giggles. On the far side of the village a path leads down a grassy slope to a wide bank along the river shaded by large sheesham trees. It is a beautiful place. To the north the blue mountains stand against Central Asia; to the south there is only a windy space. In winter and early spring the braided Indus is clear blue, dark in the deeps and flashing turquoise in the shallows, and its wide valley is studded with white sandy islands. This is the season when the river is at its lowest and in this season, in 326 BC, Alexander prepared to cross. Taxiles had left, as gifts, 'two hundred talents of silver, three thousand oxen and over ten thousand sheep for sacrificial purposes, and some thirty elephants'.\(^{14}\) The boat-bridge was ready and in addition one of Alexander's lieutenants had built two thirty-oared galleys and collected a number of small boats. Tens of thousands of soldiers, Greeks and mercenaries, infantry and cavalry, had to be transported across the river, thousands of horses and baggage animals, tons of weapons, ammunition and stores, and a great host of camp followers. The horses might have forded and swum the river; the galleys and local goatskin rafts may have been used for some supply transport; but the boat-bridge must have been the main route for the army.

When they reached Taxila Alexander allowed his soldiers a short period of relaxation. Athletic games and horse races were held on the plain beside the Indus and the two kings feasted each other. The next obstacle to the Greeks was the Jhelum, the great Indus tributary to the east, and before leaving Taxila
Alexander made sacrifices to the gods and found that the omens were favourable for crossing it. The boats he had used on the Indus were dismantled, carried by cart to the Jhelum and re-assembled there. Marching eastwards, fighting all the way, Alexander crossed two further tributaries of the Indus, the Chenab and the Ravi. At the fourth, the Beas, the army, exhausted by years of campaigning in foreign parts, finally insisted on returning home. Bitterly, reluctantly, Alexander was forced to accept their decision and turn back.

Like Darius he had always been fascinated by the Indus. He had taken scientists with him to study local plants, animals, folklore and religions all along his route. But the great river itself, especially now that he was being forced to leave India, might still be the most important discovery of all. From the accounts of early Greek historians such as Herodotus and Ctesias he would have heard of the ‘shady feet’, a race of men living beside the river whose feet were so large that they could be used as sunshades, and been told that the Indus, never narrower than four miles or wider than twenty, produced only one animal, a huge worm which came from the muddy bottom of the river to eat oxen and camels. Alexander had himself seen crocodiles on the Indus (perhaps the huge worm?) and wondered whether this meant that the Indus was connected to the Nile, but the local people assured him that their river ran into the sea.

According to correspondents to a modern Pakistan newspaper there are plenty of crocodiles in the Indus still and the stories in which they figure seem as tall as any of the early Greek tales. In 1922 a man fell into the Indus, found himself dragged down, took out ‘the dagger which I always carried for self defence’ but ‘started slipping inside the body of an animal’. On recovering consciousness some miles down river he was told by officers of the Royal Engineers that ‘I had escaped from a crocodile’. In 1957 when some youths were bathing in the Ravi a male crocodile suddenly emerged from the depth of the water and attacked them. A daring student who tried to repel the attack with a knife was devoured alive by the reptile. This caused quite a panic among the boys who managed to escape as the river beast was swallowing their daring companion, tears rolling down its eyes. When the victim got inside the stomach of the crocodile he is said to have ripped open its belly with his knife and jumped out of the beast as it lay dead in the water. He was admitted to Ganga Ram Hospital where after some treatment he was discharged.
The possibility of exploring the Indus had been in Alexander’s mind from the outset of his campaign and he had included in his forces a number of Mediterranean shipbuilders and oarsmen. During his advance to the Beas he left them on the Jhelum, to build boats for a later expedition downstream, and when he was forced to turn back himself he found the boats ready. He determined to return to Greece not by the way he had come but via the Indus and the coast. The fleet consisted of eighty armed galleys with fifteen oars on each side, probably equipped with a low ram at the bows and a forecastle for archers, a number of barges to carry horses and supplies and a swarm of small native craft requisitioned from the river villages; altogether almost 2,000 vessels. Under the command of his friend, Nearchus, this great assembly of boats sailed and rowed down the Jhelum into the lower Indus, the army marching along beside it and on to the sea.

Alexander founded a number of Greek settlements in northwest India but none of the cities, one of which is said to have been built in memory of his horse Bucephalus, has survived. On his departure one of his generals, Seleucus, assumed power over his Indian, Afghan and Persian conquests but only twenty years later a new emperor, an indigenous Alexander, Chandragupta Maurya, starting from a state on the other side of India near the north of the Ganges, was pushing westwards to the Indus; in 303 BC he defeated Seleucus and, for the gift of 500 elephants, gained dominion over the Potwar Plateau. The Mauryan Empire expanded steadily until it covered most of the subcontinent and it lasted over a hundred years. To the central Indus region the Mauryans brought a whole new way of life when Chandragupta’s grandson Ashoka, the greatest of his dynasty, was converted to Buddhism. As a young man he had enjoyed fighting but during one of his campaigns in eastern India, entirely successful from a military point of view, he saw hundreds of thousands of people killed and deported and was sickened by the misery and destitution he had caused. He turned against all killing, even of animals. Buddha’s teachings attracted him but it was only after two and a half years of study and meditation that he was able wholeheartedly to accept them.

Buddhism, born in north-east India, had already made many converts on that side of the subcontinent but in the northwest a priestly and esoteric form of Hinduism, Brahmanism, had so far remained unchallenged. The valley of the Kabul River now became a great Buddhist centre. Ashoka enthusiastically encouraged
the saffron-robed monks to preach in the valley and built dome-shaped stupas there to honour Buddhist saints; Buddhist monasteries and libraries were established on both sides of the Indus. All over his Empire Ashoka set up great pillars of sandstone inscribed with the teachings of Buddha. Missionaries were sent west to Greece and Egypt, south to Ceylon and north to China, Central Asia and the high Indus; on their success, pilgrims began to arrive from distant countries to pray at the shrines and study in the various institutes of Buddhist learning near the Indus. As in Ladakh Buddhism, gentlest of religions, created an atmosphere in which trade could be developed peaceably and with confidence. Charsadda and Taxila, the last towns west and east respectively before the Indus crossing, were already well known as staging posts on the ancient trade route between India and the West; for centuries the caravans had paused here to rest and replenish their stocks. At Ohind and at Attock ten miles down-river, bridges of boats in winter and ferries in summer had carried the traders across. In Ashoka's reign these towns, and many others near the Indus, catering to an ever-increasing traffic of teachers and students, pilgrims and merchants, spread and flourished.

The peaceful years lasted a sadly short time. Ashoka died in 232 BC and the Mauryan Empire soon disintegrated. For the next 2,000 years, with only a few brief intervals, the middle Indus was the scene of innumerable savage struggles. Invasion came always from the west and few conquerors lasted for more than a hundred years. Bactria, on the far side of the Hindu Kush, had long been a Greek colony; as the Mauryan Empire collapsed the Bactrian Greeks saw their chance and poured into north-western India, establishing their capital in Taxila and then continuing down the Indus to the sea. Within ninety years they had begun to quarrel among themselves and as their hold on the country weakened the next wave of invaders, the Sakas, moved forward across the mountains of Afghanistan and in their turn set up their capital at Taxila. The Sakas' strength lay in armoured cavalry whose main offensive weapon, used with tremendous dash and courage, was a long lance. A hundred years later the Parthians, almost cousins of the Sakas in their Central Asian homelands, swept into the area armed with heavy cavalry as formidable as the Sakas' and light cavalry whose riders could shoot arrows at the gallop in any direction, even backwards. Soon after Christ was born the Parthians ruled north-west India.
Of their kings the most famous is Gondophares; he lived to AD 48 and according to legend the Apostle St Thomas, on his first mission to India, visited him near the Indus.

The Parthians ruled for only seventy years. About AD 75 the region fell to yet another wave of invaders from Central Asia, the Kushans, who defeated the Parthians at Taxila itself. The city was largely destroyed. The Kushans drove across the north of India to the Ganges, and at its height their Empire stretched from the Aral Sea to the shores of the Indian Ocean. The Indus was at the heart of the Empire and beside its banks they held power for the unusually long period of almost 200 years. Kanishka, King during the middle years of Kushan power, was converted to Buddhism, like Ashoka 400 years earlier. Buddhist missionaries set off once more from the Indus and Buddhist culture spread over Central Asia and as far as China, Japan and Korea. The Buddhist shrines and libraries near the Indus that had been destroyed in the years of war were rebuilt. Chinese pilgrims appeared again. Friendly relations with Rome were established, and the trade routes to the north and west of the Indus, on which travellers had known little security since Ashoka’s time, became highroads. Toleration was the hallmark of Kanishka’s reign and people of widely different religions and cultures mixed freely. Alexander had left Greek settlers behind him and their descendants had been reinforced by later Greek emigrants; and in the benign and prosperous circumstances of the time Greek and Roman influences combined with local traditions and Buddhism to produce one of the greatest schools of art in Indian history. The famous Gandhara sculptures, mostly representations in the round or in relief of the Buddha, his life and his disciples, are cut from dense, dark and heavy stone. The draperies have a Roman style but the figures are plump and the faces have an oriental serenity. The Buddha’s mouth curves into a half-smile, secretive and a little snug. There is grace and nobility here, and subtlety, and a certain sly humour.

Kanishka died about AD 150 and Kushan power gradually waned, possibly due in part to the effect on the rulers of the Buddhist doctrines of non-violence. The last Kushan king reverted to Hinduism but Kushan rule was already doomed, for another great power had arisen in the west, the Sassanians. About AD 230 they reached the Indus and although the Kushans continued to rule in the eastern part of their Empire for some time, their day was over in the Indus region. For 130 years the
Sassanians governed the lands along the west bank of the Indus as far south as the sea.

Since Alexander had left it the middle Indus had experienced in 800 years a first invasion from the east (the Mauryan), followed by five from the west (Bactrian Greeks, Sakas, Parthians, Kushans and Sassanians). Apart from the Mauryans, the invaders – even the Kushans – had all, to a greater or lesser extent, been under the influence of Greece and had brought Greek ideas and skills to India; their invasions (roughly 200 BC to AD 400), according to Dr Toynbee, are ‘the real Hellenic intrusions upon India’. Now the Indus people were to experience a different and crueler conqueror.

In Central Asia the Huns were beginning to migrate southwards. For a short time the Kidarites, fleeing before them from Bactria, held power in Gandhara but by the second half of the fifth century the Huns themselves had poured into the Kabul valley. They crossed the Indus and within a short time spread right across northern India. They ruled it by terror. One of their kings, wrote a Chinese visitor, ‘practised the most barbarous atrocities’. Fighting was almost continuous and the king had ‘seven hundred war elephants, each of which carries ten men armed with swords and spears, while the elephants are armed with swords attached to their trunks, with which they fight at close quarters’. When the elephants were not needed for war they could be sacrificed for entertainment; another king is said to have enjoyed their screams as they were driven over high cliffs to their deaths. Monuments, temples and libraries were destroyed; trade stopped; for dark years the country of the middle Indus was lost to barbarism.

Barbarism creates its own antidote. By the middle of the sixth century the Sassanians, with Turkish allies and the wholehearted assistance of the local tribes, had rallied to drive the Huns out of the Indus valley. But even when it is overcome, barbarism leaves a legacy of confusion. There are practically no records of events in the north-west of India for nearly 400 years. The tribes raided and fought each other continually; from time to time a chieftain attained some local power, only to be swept aside in his turn. There was no cohesion or stability. There were no recognized overlords on earth, and in heaven the Hindu gods had long been displaced by Buddha who, his temples now in ruins, was himself discredited. All down the Indus the Huns had left a political and spiritual vacuum; the country that is now
Pakistan was like a coast from which the sea has been sucked away before a tidal wave. The wave was Islam.

Its impact was felt as early as the eighth century in the extreme south, from Arab invaders at the mouth of the Indus. Not until much later did it reach the middle Indus and then it came not up the river from the first Arab settlements but across the mountains from the west. By the tenth century Turkish Moslem forces were raiding down to the Indus valley. Buddhism had already lost ground to Hinduism. The Hindu kingdoms, one of which was based on the Indus, proved hard to dislodge. Al-Biruni wrote that 'the Hindus believe that there is no country but theirs, no nation like theirs, no kings like theirs, no religion like theirs, no science like theirs. They are haughty, foolishly vain, self-conceited and stolid.' This self-confidence may have helped the frontier kingdoms to hold out. But the Ghaznavids were establishing themselves in the mountains to the west of the Indus and the Hindu kingdoms were doomed.

The founder of the Kingdom of Ghazni, Sabuktagin, was a Central Asian slave. His first owner acquired him when he was twelve, brought him up as a Moslem, educated him, trained him as a soldier, and then took him to the Bokhara market where, at seventeen, he fetched a high price from a local notable. Within a short time his good looks and manners had attracted the attention of his master's chief (who had himself started life as a slave) and Sabuktagin changed hands once more. He rose rapidly; he became a favourite courtier, he married his master's daughter. A shift of power forced the whole family to move down to Ghazni, a mountain town some 200 miles west of the Indus. By AD 977 Sabuktagin was King of Ghazni. He was in an excellent position to make continual attacks on the river plains. The Hindu kingdoms were reduced, Sabuktagin moved his frontier to the Indus, and Islam gained many adherents.

When Sabuktagin died his eldest son, Mahmud, was away from Ghazni and a younger brother was appointed to the succession. Mahmud at once returned to Ghazni, defeated his brother and imprisoned him for life. Raiding north to the country near Bokhara as soon as he had disposed of his brother he earned credit from the Caliph of Baghdad in token of his success as a missionary and he swore to spend his life fighting against the infidel. With 10,000 cavalry he challenged the combined Hindu kingdoms near the Indus; they fielded 12,000 horsemen, 30,000 foot soldiers and 300 elephants. The battle lasted all day. He
won, and Hindu power in the middle Indus region was finished; even Hinduism itself was almost extinguished. Year after year, attended by savagery and destruction, Mahmud of Ghazni charged down to the Indus and across it. The Hindus fought desperately but their elephants were no match for Mahmud’s fast cavalry; their temples were looted and destroyed, their towns were sacked. Sometimes, when the Hindus realised that defeat was inevitable, they committed mass suicide: while their women and children burnt to death on a huge pyre the men rushed out to die in battle.

One Moslem writer described Mahmud as ‘the brightest luminary on the political firmament of the eastern Muslim world’, and a remarkable conqueror, empire-builder and patron of the arts. Another notes with satisfaction that he ‘launched seventeen stormy invasions on India and razed the power of infidels to dust’. Other historians, rather naturally, do not share the Moslem view of Mahmud. A British professor believes that ‘though Muslim chronicles depict him as a staunch propagator of Islam, intent on converting the infidel and bringing India under the control of the true faith his expeditions were for the purpose rather of plunder than of conquest’. The destruction in one of Mahmud’s raids, wrote an Indian, was ‘to remain for many centuries in the Hindu mind and to colour its assessment of the character of Mahmud, and on occasion of Muslim rulers in general’. When he died in 1030 it was ‘to the relief of the people of northern India, who had come to associate his name with annual raids and idol breaking’.

His capital, Ghazni, had been enriched by the spoils of Mahmud’s raids, hundreds of pounds of gold, ‘jewels and unbored pearls and rubies, shining like sparks, or like wine congealed with ice, and emeralds like fresh sprigs of myrtle, and diamonds in size and weight like pomegranates’. Thousands of slaves had been driven westwards over the Indus to construct new buildings in the capital. But after Mahmud’s death Ghaznavid power weakened, other tribes moved in and its mosques, libraries and museums were laid waste. By the end of the twelfth century another chieftain was in power at Ghazni. Muhammad Ghuri raided across the Indus like his predecessor, even establishing a brief suzerainty over the lower Indus countries, but this lasted a shorter time and in 1206 he was knifed by an assassin on the banks of the river. By now most of the people along the river had become Moslems, some through conviction, others in the hope
of improving their ‘out-caste’ status as Hindus, many simply in fear of death. They were once more divided, and unprotected by their overlords, and in Central Asia, the breeder of storms that had already twice overwhelmed them with the Aryans and the Huns, another and more terrible tempest was building up.

Far to the north Genghis Khan had somehow managed to weld the fierce nomadic tribes of Mongolia into a disciplined, self-sufficient and incredibly quick-moving army. Their round felt tents for families and domestic equipment could be mounted on top of yak-carts; making and breaking camp was then a matter of minutes. Herds of cattle driven along with the troops provided meat and cheese; for other foods the Mongols looted the countries they passed through. On fast, sturdy ponies (of the type that Moorcroft, the veterinary surgeon, approved 600 years later), accoutred in fur and leather and armed with bows and arrows, lances, axes and swords, mobile as quicksilver, and utterly ruthless, the hordes of superb horsemen conquered most of China and Central Asia, leaving a wilderness of devastation and death behind them. ‘The greatest joy a man can know,’ said Genghis Khan, ‘is to conquer his enemies and drive them before him. To ride their horses and take away their possessions. To see the faces of those who were dear to them bedewed with tears.’

In the early thirteenth century, already masters of Central Asia from Korea to the Caspian, the Mongols began to raid across the Indus. These were perhaps the worst of all the frightful attacks that the Indus valley people had suffered. Cities were razed to the ground, the defeated were enslaved, or slaughtered in cold blood in thousands. The most savage of all the Mongol raids was the last, in 1398. It was led by Genghis Khan’s successor Timur the Lame, or Tamerlane. In one year he sacked Delhi, fought his way to the Ganges and back again to the Indus, and everywhere he went ‘the monster that hath drunk a sea of blood’, the ‘scourge of God’, left bodies and ruins behind him.

Somehow the Indus people survived. Foreigners had passed through them for centuries, heading east, usually inflicting the maximum pain and destruction, sometimes leaving settlers or stragglers behind to be themselves killed or enslaved. The people of the river-bank villages sowed and harvested and defended themselves as best they could. Like the Huns – like so many other invaders of India – the Mongols had ridden over them, savaged them and despoiled them, and then in the end gone away again. But in 1525, when Prince Babur rode through their
country on his way to the capture of Delhi and the foundation of
the dynasty that was to hold power over practically all the
Indian subcontinent for 300 years, they were faced with a new
type of Mongol, a new type of invader, an octopus as opposed to
a shark.

Babur was descended in the male line from Tamerlane and in
the female from Genghis Khan himself. His own descendants
were to become famous as the ‘Moguls’ (a corruption of ‘Mon-
gols’), but Babur considered himself a Turk and a Persian and
enjoyed good living as much as the satisfactions of wielding
power and dealing death. In the intervals between building an
empire, fighting, hunting and drinking he found time to write his
memoirs, and very lively, honest and amusing they are. His
father was the King of Ferghana, on the eastern rim of Persia,
situated on the extreme boundary of the habitable world. It is of
small extent, and is surrounded with hills on all sides except the
west.' He was ‘a prince of high ambition and magnificent pre-
tensions, and was always bent on some scheme of conquest . . .
repeatedly defeated’. He was ‘of low stature, had a short bushy
beard and was fat. He used to wear his tunic extremely tight,
insomuch that as he was wont to contract his waist when he tied
the strings; when he let himself out again the strings often
burst.’ Babur was the eldest of three sons. His mother ‘was Kut-
lak Khanum’ and he had five sisters. Since he bothers to record
them his attitude to women was unusual for his time and race.
When he was eleven years old his father was killed in an accident:
he was ‘engaged in feeding his pigeons, when the platform
slipped, precipitating him from the top of the rock, and with his
pigeons and pigeon-house he took his flight to the other world’.
Advised and supported by his grandmother (‘uncommonly far-
sighted and judicious’) Babur held on to his small throne; she
died when he was fourteen and he was then on his own.28

He learnt fast. He was as clear-eyed and savage about the
realities of power-politics as any of his Mongol ancestors. In
the same century that Babur took his father’s place Marlowe put
words into Tamerlane’s mouth that Babur himself might have
recognized:

Be all a scourge and terror to the world,
Or else you are not sons of Tamberlane.29

Although Turkey and Persia had partly smoothed his Mongol
heredity, so that he appreciated gardens and wine, wrote poetry
and later counted the various types of tulips growing near the Indus (sometimes as many as thirty-four, he found) Babur was still, and always, formidably tough. He rode hard and fought fiercely and with relish. In search of horses and sheep he would fall on the tribes and ‘beat them to our hearts’ content.’ In battle he could admire the bravery of his enemies but he killed them without compassion and then often ‘directed a tower of skulls to be made of their heads’. Attempts – even imagined – on his own person were dealt with ruthlessly. Once, after dinner, he vomited and although a dog and the two men who had been forced to eat the food that he suspected had themselves recovered, ‘the taster was ordered to be cut to pieces. I commanded the cook to be flayed alive. One of the women was ordered to be trampled to death by an elephant; the other I commanded to be shot.’

Babur arrived on the Indus because – unlike every other invader – he had actually been invited. Fifty years after Tamerlane had sacked Delhi and returned to Central Asia the rulers that he had appointed there were overcome by the Lodis, Pathans from western Afghanistan. A later Pathan poet, Khushhal Khan Khatak, wrote proudly:

... in days gone by Pathans were kings in Hind;
For six or seven generations theirs was the Kingdom,
And all the world wondered at them.31

Six or seven generations is not really very long and not for the last time the Pathans showed that they could take power but were unable to hold it. Within less than a hundred years they were so divided among themselves that the governors of the lower Indus provinces of the Punjab and Sind, hoping to achieve greater independence, appealed to Babur for support against their own king. He had already made several successful raids across the Indus from his small kingdom; the call for help from the dissatisfied Afghan nobles on the east bank, he saw at once, was an opportunity to advance his frontiers permanently. ‘I placed my foot in the stirrup of resolution, and my hand on the reins of confidence-in-God,’ he wrote, and marched for Delhi. The armies at Delhi were said to be 100,000 strong; his own force ‘Great and small, good and bad, servants and no servants ... numbered twelve thousand persons’.32 With this small flying column Babur had taken Delhi a year after crossing the Indus in 1525.

Babur’s rule in India lasted only four years, for he died in
1530. Although it was 'a large country and has abundance of gold and silver' and 'workmen of every profession and trade are innumerable, and without end' he never took to it.

Hindustan is a country that has few pleasures to recommend it. The people are not handsome. They have no idea of the charms of friendly society, of frankly mixing together, or of familiar intercourse. They have no genius, no comprehension of mind, no politeness of manner, no kindness or fellow-feeling, no ingenuity of mechanical invention in planning or executing their handicraft works, no skill or knowledge in design or architecture; they have no good horses, no good flesh, no grapes or musk-melons, no good fruits, no ice or cold water, no good food or bread in their bazaars, no baths or colleges, no candles, no torches, not even a candlestick.33

Babur's descendants, the Great Moguls, held most of the Indian subcontinent and Afghanistan for some 900 years. Their courts at Delhi were famous for their exotic richness and splendid pomp. But Delhi is a long way from the Indus and all the power of the Mogul emperors could not keep the people on their western borders under control for long.
A ‘SAVAGE BRILLIANCY’

On the Potwar Plateau the mountains draw back from the Indus, but not very far. To the north and west they cut the sky like a saw. They are notched with passes and their flanks are sliced white with a thousand streams. The narrow valleys coil like snakes half asleep in the scorching sun; patches of vegetation spring out of the red rocks like green fire. It is a place of ‘savage brilliancy’, thought Winston Churchill. Another Englishman wrote that it often gives ‘an impression of beauty indescribable in its clarity’.

Up to this point the Indus has received only three important right-bank rivers: the Shyok, the Shigar and the Gilgit. Now the Kabul River comes in from the west, creating one of the most famous of all the Indus tributary valleys, the Vale of Peshawar, as fertile as Kashmir and even more disputed. The Kabul rises high in Afghanistan; after slow miles of muddy bogs and steep miles of red-cliffed defiles, fed by snow-melt from the rivulets of the Hindu Kush, by monsoon rains and local storms, it reaches the Indus as brown and rich as cocoa. For several hundred yards after their confluence the two rivers keep their separate identities, brown and blue, or brown and grey, running side by side.

The lower Kabul valley is a wide and level expanse of bright fields ribboned with sparkling streams lying between high ridges of bare mountains, grey and violet and crowned with snow. In the clear, cool days of winter and early spring, it can be very beautiful. There are many birds in the valley. Dark mynahs haunt every hedgerow, their white-barred wings giving in flight, as Rudyard Kipling’s father observed, ‘a curious effect of rotation’. Kites ride the middle air, screaming their long breathy ‘whee-whee’; glossy black crows, blue flycatchers and grass-green bee-eaters perch on boughs and twigs silently watching for their prey; kingfishers flash turquoise along the river. Occasionally a lilac-breasted roller, a dull and dun-coloured
bird at rest, takes off and becomes a miracle of different shades of blue as soft and brilliant as the blues the Virgin Mary wears in early Italian paintings. In every open flat space hoopoes probe the ground with their long curved bills.

‘Identification – unmistakable’ says a British bird book of the hoopoe; few hoopoes ever reach England and they are such strange and beautiful birds that the occasional visitor is indeed instantly recognized. Even in India the hoopoe is truly unmistakable. Longer and slimmer than a thrush, bright chestnut from its head to its middle, the hoopoe’s tail and wings are striped across in black and white, and it has a crest, chestnut tipped with black and white, which can fold up like a fan. In legend the crest was golden for a short time. One day, when King Solomon was sweltering in the sun, a cloud of hoopoes flew over his head to give him shade. He asked what they would like in return for their service. Golden crowns like your own, they said. Solomon bestowed them and they preened themselves. But they had become too conspicuous to the bird-catchers and were now killed and caught in hundreds. At last the survivors begged to be relieved of the crowns that had brought them so much trouble and were given, instead, a crest of feathers. They were still hunted by falconers. Their flight is undulating and rather slow; even without their golden crowns they might seem easy game. But the hoopoe is ‘a past-master in the art of jinking and dodging; and the manner in which he times the onslaught of the merlin, and jerks himself a couple of inches to right or to left, is a sight for the gods. The merlin thus cheated of his victim is carried on by sheer force of momentum some sixty yards before he can turn for another dash at the hoopoe. Meanwhile the latter is steadily flapping towards cover.’ With one falcon there is little hope of catching a hoopoe: only two hunting birds, working together, can succeed.

Many hunters have enjoyed their sport in the Kabul valley. More than 400 years ago, near the place where Alexander had crossed the Indus, Babur tried for a rhinoceros. His men had forced it into a wood and ‘We immediately proceeded towards the wood at full gallop and cast a ring round it. Instantly, on our raising the shout, the rhinoceros issued out into the plain and took to flight.’ In the nineteenth century tigers, leopards, wild goats, jackals and foxes, together with partridges and snipe and other birds, still provided good hunting for British officers on the frontier. In 1870 the Peshawar Vale Hunt held its first meet, with
hounds specially imported from England, and for over sixty years, undeterred by crops, watercourses, sand, rock and the risk of crossing the Afghan border by mistake, it galloped regularly through the upper Kabul valley. At Partition a British hunt official shot every one of the hounds, and the horses, in fear that they might not be well treated in the new era. Eventually, through the efforts of British who had formerly served in India, seven and a half couple of hounds were sent out to Peshawar from England as replacements.

Rich in birds and animals the Kabul valley has also always been rich in grains and fruits. Chinese pilgrims to the Buddhist shrines and libraries noted that ‘all provisions necessary for men are very abundant’ here; there were cereals of every kind, sugar cane, fruits and a variety of flowers. Much later Babur was enchanted by the vivid greenness of the valley and the chenar, pomegranate and orange trees. The spring, wrote Khushhal Khan, blossoms here in

... violet, iris, crocus, sweet rihan,
Narcissus, pomegranate, and arghawan
And above all the tulip royal red.

Later again a British envoy found the valley threaded with watercourses and bright with quince and plums, with willows and avenues of mulberries. Today it is even more intensively cultivated, for the farmers are supported by an agricultural research station which helps and advises them on the production of new and better types of crops.

Between the orchards and the fields of grain and clover big fleshy poppies blow pink and white and red in the spring wind. They are *papaver somniferum*, the opium poppy. Harvesting them is a fiddling and wearisome business of pricking the flower capsules and squeezing and drying their juice, but immensely profitable. Their cultivation was for years encouraged by the East India Company, which needed a cargo to take to China to pay for the large quantities of tea that they were carrying back to Europe. The Chinese tried to stop the trade but the British ships continued to smuggle in opium in quantity and the profits from this inglorious commerce were an important element in the Company’s prosperity. Today the poppy is officially outlawed by Pakistan, except under licence for medical purposes. However, there are still many bright fields near the river.

The Kabul valley is scattered with villages and small towns.
At its head stands the Khyber Pass and the Afghan frontier; thirty miles east of the pass is Peshawar, meeting place of merchants and tribesmen, of cultures and commerce, whose very name means ‘frontier town’. Parts of it have been repeatedly destroyed in battle, for Peshawar has always exerted a magnetic attraction on its neighbours, but its position is too important, and its people too tough, for it to be reduced for long. It is several towns rather than one; streets of mud-houses straggle over one quarter, handsome villas stand in shady lawns in another; there is a barracks area, there is a large bazaar. For thousands of years *kafilas* (or caravans) have converged on Peshawar. The cheerful bustle of their arrival in the nineteenth century was captured by Rudyard Kipling:

> When spring-time flushes the desert grass,  
> Our kafilas wind through the Khyber Pass.  
> Lean are the camels but fat the frails,  
> Light are the purses but heavy the bales,  
> As the snowbound trade of the North comes down  
> To the market-square of Peshawur town.  
> In a turquoise twilight, crisp and chill,  
> A kafila camped at the foot of the hill.  
> Then blue smoke-haze of the cooking rose,  
> And tent-peg answered to hammer-nose;  
> And the picketed ponies, shag and wild,  
> Strained at their ropes as the feed was piled;  
> And the bubbling camels beside the load  
> Sprawled for a furlong adown the road;  
> And the Persian pussy-cats, brought for sale,  
> Spat at the dogs from the camel-bale . . .  
> And there fled on the wings of the gathering dusk  
> A savour of camels and carpets and musk,  
> A murmur of voices, a reek of smoke,  
> To tell us the trade of the Khyber woke.¹⁰

Over the centuries the Khyber Pass was often closed to traders, sometimes for long periods of time as one or another invader of India grasped the keys of the north western gates. It has never been closed at all to smugglers, however. Carpets, silks, cigarettes, Russian teapots, felt and copper flowed across the mountains in a response to fluctuating markets as quick and sensitive as any stock exchange could engender, and still do so. The border markets are today a smugglers’ cave of things bright, dark and half-seen. Transactions are so open and so well ad-
advertised as to be almost legitimate and authority turns its blind eye towards them, since it cannot control them.

All this traffic, whether with or without official permission, naturally requires carriage. East from Peshawar to the Indus, and across the Indian plains to Calcutta, runs the Grand Trunk Road; at the end of the nineteenth century, as part of their general strategic policy on the frontier, the British Indian Government built a single narrow-gauge railway line from Delhi to the north-west territory beyond the Indus. In such country, however, prone to flash-floods, and occasional earthquakes, the day of the pack animal may never be over.

The animals that carry people, guns and goods through the Hindu Kush have to be strong and tough. Small sturdy ponies and rangy mules are used, but the chief carrier is the camel. He has a certain 'decorative value', according to J. L. Kipling, which 'cannot be appreciated by those who have only seen one or two at a time. He was made for sequence, as beads are made for stringing. On an Indian horizon a long drove of camels, tied head to tail, adorns the landscape with a festooned frieze of wonderful symmetry and picturesqueness.' But in himself the camel is not beautiful. For some reason he has been told the hundredth attribute of Allah, which no man knows, and the exclusiveness of his knowledge has curled his loose-lipped mouth into a down-drooping and supercilious sneer. His head is small, poked forward on a long and wiry neck which joins a curiously collapsible structure, apparently doublejointed at every joint. Camels 'are symmetrically constructed as gun-carriages and their hind legs fold up like two-foot-rulers. They rest in great part on a pedestal behind the chest with which nature has furnished them, and sit close together in high-elbowed state with an indescribable air of primness and propriety.' In war camels stolidly carried supplies, or charged as cavalry across battlefields. Their large splayed feet are perfectly adapted to walking on sand and they can easily keep up a speed of some thirty-five miles a day; over short periods of time they can cover ground very much faster. But no soldier ever loved them; they kick, they bite, they are clumsy and irremediably bad-tempered:

O the oont, O the oont, O the hairy scary oont!
A-trippin' over tent-ropes when we've got the night alarm!
We sock him with a stretcher-pole an' eads 'im off in front,
An' when we've saved 'is bloomin' life 'e chaws our bloomin' arm.
The Persians, and later the Sikhs, used to mount small guns on top of camels and use their camel corps as mobile artillery; the disadvantage of this arrangement was that ‘just at the critical moment the live gun-carriage will sling round to point the gun at his friends’.

Almost as haughty in appearance and fully as self-willed as the camel are the Pathan tribes who live in the bare and sunscorched mountains to the west of the Indus: a race, wrote Winston Churchill, ‘whose qualities seem to harmonise with their environment. . . Except at harvest time the Pathan tribes are always engaged in private or public war. Every man is a warrior, a politician and a theologian. . . The life of the Pathan is thus full of interest.’ Interrupted only by recurrent foreign invasions the private wars of the Pathans have flared for centuries in the mountains along the west bank of the Indus. The code is honour, the dispute concerns land or money or women; settlement is by death, often through treachery. Towards the end of the nineteenth century, for example, the Khan of Hund, more or less legally, had managed to appropriate a good deal of land from his neighbours. They naturally resented this, and decided to kill him. Two assassins from another village were hired to do the job. The Khan went to his prayers and at the appointed time his villagers turned towards the Indus and shouted: ‘See, the river is rising and coming in,’ upon which the murderers rushed to the mosque. There are scores of graveyards in the Pathan country; the rows of humped mounds, stuck with slabs of slate, are often sheltered by dark ibex and planted with white irises that glimmer in the shadows. Some hold only a few graves, others stretch for hundreds of yards. Every so often a single grave by the roadside proclaims the successful prosecution of a feud.

On their feast days the Pathan villagers near the Indus look as gay as butterflies. If it is a springtime festival the valley sparkles with jade-green wheat and flowering fruit trees; against this background the people flaunt the brilliant colours of new clothes, royal blue, green, turquoise, pink and crocus-yellow. Most of the country-women wear loose baggy trousers and tunics of patterned red and white, heavy silver necklaces and bracelets, and flashing nose-studs. In the villages the men’s shalwar and kameez and the women’s burqas are crisply white; the little girls wear satiny trousers with silver brocaded shifts, the little boys have gold and silver pillbox caps. Everybody is friendly, waving and smiling. They are not killing each other – for the
moment. But they are killing plenty of other living things. After prayers, reports a local newspaper, 'the faithful got down to the serious business of slaughtering goats, sheep and rams. Quite a few calves were also offered as sacrifice.' The roads are lined with the hides of animals, thrown down like bloody rags. Men walk along singing, carrying the two front legs of a cow against their shoulders like a rifle. Women wash blue-grey intestines in the ditches. Sitting on reeded bedsteads in the village centres old men ceremoniously divide heaps of red meat and yellow fat. Boys distribute it on huge tin trays, the crowds of men watch quietly, and even the dogs wait their turn. The 'overtones' of the celebration were 'this year as gay as ever: large numbers of people sacrificed animals'.

The provenance of the Pathan has not yet been established. There is a strong tradition among the tribes that they originated in Palestine, that they are children of Israel who were driven, or escaped, eastwards after one or other of the invasions of Palestine. This may be a myth but it has been a tenacious one. Events far away from the Pathan country may have weakened its hold, however. Not long after the Seven-Day War between Israel and the Arabs in 1967, when Pakistan rallied to her Moslem brothers, a Pakistani newspaper reported an incident in the Pathan town of Kohat:

Israel Khan, a prosperous farmer of the area who had come to this city to attend the cattle show where he had displayed fine breeds of cattle, was refused admittance into one of the hotels here on Monday. When the cultivator disclosed his name, the hotelier expressed his inability to accommodate him. At first the farmer was furious with rage, but when he learned that the hotel-keeper had taken exception to his name, the farmer cooled down a little. There on the spot he changed his name to Kosygin Khan. He was then accepted as an honoured guest.

Wherever the Pathans came from they must have in their veins the blood of all the invaders that ever struggled over the passes into India and left settlers and slaves and pregnant women behind them. What is more significant in their make-up than family tree or even religion – originally pagan, then Hindu, Buddhist and finally Moslem – is the type of country they live in.

From above Tarbela and for some 400 miles downstream the Pathans occupy the right bank of the Indus, a great stretch of territory that extends well into Afghanistan. Valleys such as the Kabul River valley are rare. Most of the area is a wilderness of rock in which narrow defiles wind beneath steep precipices and
overhanging crags. It is perfect highwayman’s country. With very little effort a few tribesmen perched like eagles at strategic points could hold up any caravan and even the outriders of armies that passed below them. They lost no opportunity of doing so. If the tribes had worked together they could have commanded the passes from the west. They preferred guerrilla wars, in which each tribe acted independently, often more interested in routing its next-door neighbour than in presenting a united front against the invader. Fighting was not only a duty but a pleasure to the Pathan:

He says Allah
Is good and sweet
To him who laughs
And sings and dies.
He says the cowards
Weep and work,
But fighters go
To Paradise.¹⁸

Their women, whose principal function was to bear sons, could be relied upon to tend the fields while the men were away fighting; for heavy work a mule or donkey is still considered more useful, but women have the advantage of being able to reap the fields and to hand ammunition in battle. They are regarded as inferior creatures but generally treated chivalrously; they even inspire romantic lyrics:

Rosy and fair to the eye are the daughters of the Afridis,
Maids of the Adam Khel, lovely, how lovely they are!
Large and liquid eyes, brows arched, long lashes a-tremble,
Sugar lips, cheeks like flowers, foreheads as bright as the moon;
Proud little heads encircled with dark curls fragrant as amber,
Rose-bud mouths that reveal teeth set in even array;
Soft and rounded body, as smooth to the touch as an egg shell,
Ample hip and thigh, tapered to delicate heel . . .¹⁹

The poet must have been writing of women in the mountains; in the towns or even the villages he could never have seen their ‘rose-bud mouths’, far less their ample hips and thighs, for they would have been enveloped from head to foot in burqas and would¹⁴ have looked more like walking bolsters than human beings.

The men, on the contrary, are self-assertive and self-conscious. They are usually of medium height and lean; they wear long shirts and baggy trousers of heavy dark grey cotton and on
their heads either a fur cap or a turban, black, brown or grey. Their shoes are *chaplis*, heavy sandals, open-toed and loosely strapped round the heel. Some of them tuck a flower in their caps or the buttonhole of their shirts. They carry themselves proudly but not stiffly; their kohl-rimmed eyes stare the world down. A young Pathan, wrote Kipling, ‘trod the ling like a buck in spring, And he looked like a lance in rest’. 20 Their faces are often almost Grecian, the forehead and long nose in one straight line. They improve with age. Pathan elders with their beaky noses and jutting chins look like legendary kings; just such a face might Alexander have had if he had lived long enough.

Nobody can be indifferent to the Pathans. They inspire extreme admiration and extreme irritation, sometimes in the same person. They are brave and cunning, honourable and unreliable, proud and mercenary, clever and bigoted. Many foreigners have found them attractive; it is probably fair to say that most of the British, for example, who lived and worked with the Pathans fell under their spell. They are apt to see themselves in aristocratically romantic terms. Of his own countrymen a Pathan says: ‘His temperament, like his clothes, is picturesque and elegant. He loves fighting but hates to be a soldier. He loves music but has a great contempt for the musician. He is kind and gentle but hates to show it. He has strange principles and peculiar notions.’ 21 Khushhal Khan wrote of his clansmen:

Khatak horseman armour-bearing,  
Proudly o’er the plain careering,  
Lusty, eager for the fray,  
Targe on hip, his banner streaming,  
Shadow-casting sets him dreaming  
Dreams of chieftainship one day. 22

Lying across the main roads from the west to India the Pathan country is of the greatest strategic importance but it has never been controlled closely or effectively, by anyone. Most of the invaders who fought their way through the tribal regions were content, once they had established themselves in the valleys and the plains, to leave the mountain people alone. With Babur’s conquest of Delhi in 1526, however, it seemed that the Indus had come under a central authority which encompassed most of northern India. But only a few years after Babur’s death Sher Shah, a Pathan, ‘the most illustrious Afghan in history’, 23 defeated Babur’s son Humayun, drove him out of India and held
his throne for six years. During this short time Sher Shah succeeded in imposing some control and cohesion on the Pathan tribes but when he died they split apart once more. His story, according to Sir Olaf Caroe, who knows the Pathans intimately, ‘illuminates very forcibly the strength and weakness of Pathan character. A leader rises, great enough to gather men around him and make them forget their personal factiousness for one crowded hour of glory. He dies and with him dies his inspiration. In the absence of the man who commanded trust, tribal jealousies are reasserted, everything that was gained falls away.’

Humayun recovered his throne in Delhi but was unable to control the brother who governed, in his name, the domains that Babur had held on the west bank of the Indus. In 1556 Akbar succeeded Humayun. One of the greatest of all the Indian monarchs, Akbar ruled for the long period of forty years; but even he was unable to establish a real grip on the Pathan tribes and repeated punitive expeditions failed to subdue them. Eventually certain tribes agreed, for a subsidy, to keep open the Indus ferries and the road west; the chieftain who was granted the ferry and highway tolls at Attock, on the southern edge of the Potwar Plateau, was Khushhal Khan’s great-grandfather. But other tribes were soon in revolt once more and an expedition sent to quell them in 1586 was soundly defeated. From then on Akbar sent no major expeditions across the Indus but tried to control the area from strategically sited forts; one of these was built at Alexander’s crossing place, Hund; another lower down the Indus at Attock.

Akbar died in 1605 (he was a contemporary of Queen Elizabeth I almost to the year) and the next two Moguls, Jahangir and Shah Jahan, continued to try to subjugate the Pathans, on the whole in vain. Shah Jahan had executed all his male relations at his own succession, to ensure that their ambitions should not threaten his position; when he grew old himself his four sons quarrelled bitterly and one of them, Aurangzeb, killed his three brothers and other possible pretenders, put Shah Jahan in prison and assumed the throne. The Pathans continued their periodical rebellions and their inter-tribal wars; one of the consequences was that the Khataks lost the right to levy the Attock tolls. Khushhal Khan, now chieftain of his tribe, bitterly resented this, and the simultaneous advancement of a rival tribe, and although he took no violent action at first he poured out a series of poems savagely attacking Aurangzeb:
Aurang, full well I know him. So just is he, so fair
Precise in all observances, punctilious in prayer.
But he slew his own blood brothers in fratricidal strife,
Gave battle to his father and imprisoned him for life.
The devotee a thousand times may brow to earth incline
Or by repeated fasts may bring his navel to his spine,
But if his act mate not with speech to further good intent,
His posturings are profitless, his fastings fraudulent.
The outward of the snake is fair and glossy is her skin,
But venom lurks behind her lips and treachery within.
The valiant speaks but little; by deeds his praise is sung;
The coward and the braggart make sword-play with their tongue.
My words reveal, to him who reads, a portrait of Aurang.
My hand can never reach him, but hear me, Lord, I pray!
To Aurang, Lord, be merciless on Thy Great Judgement Day!25

Kushhal Khan was eventually sent to prison in Delhi. The poems he wrote at this period are cries of longing for the rivers of his home, the Kabul (or Landai) and the Indus:

Gentle breezes, bear my greeting,
If past Khairabad ye roam,
Past the silver stream of Landai
To Surai, Surai my home.
Father Indus hail him loudly,
As across his flood ye go,
But to Landai, gentle breezes,
Softer salutations blow.
Ganga, Jamna, how I hate you,
Sluggish rivers of the plain.
Hindustan has no cool waters;
Would that I were home again,
Once again to drink of Landai –
Hell must one day loose its chain.26

Released at last from Delhi, Khushhal Khan went into open revolt against Aurangzeb, inciting other Pathan tribes to join him to such good effect that the Mogul forces were six times defeated on the frontier. He died in 1689 and is buried in the Vale of Peshawar that he loved so much.

By the end of the eighteenth century Mogul rule on the Kabul was practically non-existent. A new empire had established itself lower down the Indus, the Sikh Empire of Ranjit Singh. Once more the Pathans faced enemies across the Indus. For many years they met this new challenge with enthusiasm, and at the same time continued equally enthusiastically to fight
each other. Their weapons were muzzle-loading muskets and knives and as always they relied on the harsh complexity of their country to give them shelter and vantage points. Churchill wrote:

Into this happy world the nineteenth century brought two new facts: the breech-loading rifle and the British Government. The first was an enormous luxury and blessing; the second an unmitigated nuisance. A weapon which could kill with accuracy at fifteen hundred yards opened a whole new vista of delights to every family or clan which could acquire it. The action of the British Government on the other hand was entirely unsatisfactory towards the end of the nineteenth century these intruders began to make roads through many of the valleys they sought to ensure the safety of these roads by threats, by forts and subsidies. There was no objection to the last method so far as it went. But the whole tendency to road-making was regarded by the Pathans with profound distaste. All along the road people were expected to keep quiet, not to shoot one another, and, above all, not to shoot at travellers along the road. It was too much to ask, and a whole series of quarrels took their origin from this source.

Half-soldier, half-journalist then, always wholly a fighter, Churchill had engineered a posting to a valley running north from the Kabul River, the Malakand, in the hope of seeing action in a small war being waged between the British and the Pathans. He was too late for the first round and had to wait for the second; not very long, for peace was then usually measured in days on the frontier. In the interval he learnt to like whisky. Not far away, nearly 500 years earlier, Babur had also had a lesson in drinking. There was a party which ‘waxed warm, and the spirit mounted up to their heads’; Babur drank no wine that night in courtesy to a previous host in whose house he had refused it but from then on his memoirs are full of drinking parties: one day ‘we drank several cups’, apparently for breakfast; ‘at noon-day prayers we... had a merry party’ and ‘we continued drinking till night prayers’. Churchill already knew about wine well enough but ‘smoky-tasting whisky I had never been able to face’. Eagerly waiting to get into action, pacing the floor of the officers’ mess, ‘I now found myself in heat which, though I stood it personally fairly well, was terrific, for five whole days and with absolutely nothing to drink, apart from tea, except either tepid water or tepid water with lime juice or tepid water with whisky... By the end of those five days I had completely overcome my repugnance to the taste of whisky.’

Although the British managed to reach agreements with many
of the tribes, they found, as Akbar had learnt before them, that loose, vaguely worded arrangements could be construed differently by the two parties. Few British administrators understood that the Pathan code of honour – which, among other things, requires a man to murder his unfaithful wife and to shelter an outlaw who asks for hospitality – could never be equated with English Common Law. No Pathan could accept the idea of equality under the law between tribes, between enemies, or between men and women. The agreements were therefore a continual source of confusion and misunderstanding. Naturally the tribes followed their own code when it differed from the agreements, and naturally the British saw all infringements as treacherous. Like the Moguls they responded with punitive expeditions. From 1858 to 1881 the British sent twenty-three such expeditions into tribal territory, an average rate of one a year. As a rule the objective was not to kill the tribesmen but to destroy their villages, crops and animals. One of the soldiers charged with administering punishment to the tribes towards the end of this period was a Scot. He believed in bringing the Pathan country under strong British control. But he hated the punitive expeditions: 'I do not think this burning of villages is a good plan: it exasperates them and does not funk them. To me it is specially repugnant, as it reminds me of the days when they used to do the same with the Highlanders. There is no doubt a very strong feeling of hostility against us which all this indiscriminate hanging and burning villages intensifies.' But the problems of the North-West Frontier, for the British, overrode considerations of gentleness to the tribes. With Russia probing towards India, and Afghanistan helping to keep the Pathans in ferment, roads and communications must be kept open.

In 1893 Algernon Durand's brother Mortimer reached an agreement with the ruler of Afghanistan regarding the frontier. Sections of the Durand Line were demarcated; in such twisted and craggy hills there were many parts of it that could not be posted. The line cut across the Kabul River, was not particularly easy to defend, and divided the Pathan tribes between Afghanistan and India. But in all the circumstances it was probably the best compromise that could be reached and although there have been recurrent Afghan claims to territory east of it, on ethnic grounds, and a half-hearted Pathan call for the establishment, across it, of their own country, 'Pakhtunistan', the line has held to the present day. One important feature of it is that it allowed
a finger of Afghanistan to reach across the extreme north-west of India to the Chinese border, so that British India (and now Pakistan) nowhere touched Russia directly.

The tribesmen continued to harrass the British outposts, often simply to obtain a much-longed-for rifle. 'A friendly native,' wrote one soldier, 'is one who shoots you at night, whereas a hostile one shoots in the daytime as well.' Kipling described the sort of minor action that was repeated a hundred times in the tribal belt:

A scrimmage in a Border Station –
A canter down some dark defile –
Two thousand pounds of education
Drops to a ten-rupee jezail –
The Crammer's boast, the Squadron's pride,
Shot like a rabbit in a ride!

'Ten-rupee jezails' were superseded by more modern rifles, as Churchill grimly noted. Today the Pathan, trigger-happy as always, is able to use even more effective guns. Tribal vendettas continue and a visitor looking for the ruins of ancient and civilized Gandhara is apt to meet a dead man splashed with blood carried head-high by his sons and nephews and followed by a string of weeping women. Sometimes, with equally lethal effects, the guns are used as fireworks.

The custom of firing shots in the air at festivals, particularly during weddings is no longer necessary. Several deaths in the recent past have been attributed to this inane convention. Not long ago a wedding party turned into a funeral procession when the bridegroom was shot dead by accident. In the olden days the custom was no doubt initiated with a view to making Pathans trigger-conscious. Young men were required to use their guns at all festivals so that they could improve their marksmanship. It is no longer necessary to do this. Many and better facilities for this exist.

The 'facilities' include shooting clubs and the army.

Within the area between the Durand Line and the Indus the position gradually crystallized. West of the Indus British administration covered a strip of varying width down the side of the river; for example it stretched as far up the Kabul River as Peshawar, to the south it was narrower. Between this strip and the Durand Line lay tribal areas only loosely controlled by the British. Responsibility for all the north-west areas lay with the Punjab authorities until 1901, when the North-West Frontier
Province was set up, comprising the administered country on the west of the Indus and one east-bank district (Hazara, which includes Tarbela). The tribal territories, dealt with through Political Agencies and District Officers, also came under the North-West Frontier Province which itself reported to the central Government. The new arrangements, allowing the North-West Frontier Province a measure of control over local affairs, gave some satisfaction to the pride and spirit of independence of the Pathans and many of the valley people settled down to peace. The British extended canals in the Kabul and other valleys, introduced improved types of crops and fruit and set up a system of schools and colleges. Inevitably the Pathans began to demand a greater share in their own government. The British Indian authorities were slow to recognize the force of the demand and a new Pathan frustration found expression in the 'Servants of God', or 'Redshirts', who for a time allied themselves with the Indian Congress Party in the drive for Indian independence. After all, in this west Indus area, they thought, there could be no danger of Moslems being swamped by Hindus. Anti-British feeling went far, but not far enough for Hitler's Germany or Russia, who both sought to organize intelligence and subversive activities among the Pathans in the 1930s.

But in the welter of mountains west and south of Peshawar the tribes, who had in any case gained little from the development of the valleys, only wanted to maintain their freedom to fight each other and to loot passing caravans and any weak military detachment that might provide them with additional rifles. On the border 'scrimmages' were still endemic. The British Political Officers often took 'their' tribes to their hearts and did all they could to protect them from the consequences of their forays but were mostly unable to control them. The army, resentful of unprovoked attacks and snipers shooting down at them in the passes, responded in kind. Much of it was great fun for the warriors of both sides although recalcitrant tribes found it less enjoyable when the R.A.F., after a precise and well-understood series of warnings, flew in to bomb their villages. Sometimes as many as 50,000 British soldiers were stationed in the North-West Frontier Province; the cost, between 1924 and 1939, has been estimated at £112 million.34

Just before the Second World War, rallying to a leader called the Faqir of Ipi who seems to have been encouraged by the Germans, the tribes south of the Kabul River initiated what
turned out to be a full-scale frontier war. John Masters, a young British officer who took part in it, described the army's main problem. It was
to force battle on an elusive and mobile enemy. The enemy, while he retained any common sense, tried to avoid battle and instead fight us with pinpricking hit-and-run tactics. We had light automatic guns, howitzers, armoured cars, tanks, and aircraft. The Pathan had none of these things, yet when he tried to even up the disparity, and cum-
bered himself with stolen automatics or home-made artillery, he suffered heavily, because they constituted impediments, things that were difficult to move but were worth defending. And when he stayed and defended something, whether a gun or a village, we trapped him and pulverised him. When he flitted and sniped, rushed and ran away, we felt as if we were using a crowbar to swat wasps. Even so the scales were not so heavily loaded as it appears, for we fought with one hand behind our backs. We were usually denied a soldier's greatest weapon – aggression, the first shot.35

The Political Officers who accompanied the army were another problem. They
would have been useless if they had not identified themselves thoroughly with the tribesmen's thoughts and feelings, but we felt they often carried it too far. At the end of one day of fighting the Political Agent's young assistant came into our camp mess for a drink. M.L., in command, was in a good humour. After a confused beginning, the battalion had fought skilfully and well and several men were cer-
tain to win decorations. The young political put down his glass. 'I thought our chaps fought very well today, Sir,' he said. M.L. beamed. 'So did I. Not at all bad.' 'And outnumbered about three to one, too, I should say.' M.L. looked a little puzzled. 'Well, only in one or two places. On the whole I think the tribesmen were outnumbered.' The political said, 'Oh, I'm sorry. It's the tribesmen I was talking about.'36

On both sides the combatants gave no quarter and prisoners and wounded were treated with the appalling cruelty that has always characterized the frontier: castration, flaying alive, death by a thousand cuts, and pegging out on rocks in the terrible sun were common practices.

All the same [wrote Masters] it is wrong to think of the Frontier as an unrelieved study in barbarism. The tribesman looked on war as an honourable, exciting, and manly exercise. When they had no quarrel with the British or the Afghans they arranged one among themselves. Many of them clearly thought the Government of India organised frontier wars on the same basis. At least, there seems no other reason-
able explanation to the fact that when a campaign was over scores of
Pathans used to apply to the Political Agents for the Frontier Medal with the appropriate clasp. I think their request was reasonable. As they pointed out, they were British subjects and they had fought in the battles so thoughtfully organised by the King Emperor Across the Seas. Indeed, without their cooperation the war would have been a complete fiasco and no one would have got any medals.87

During the Second World War the British held the North-West Frontier on a short rein; when it was realized that they were really preparing to leave India, and Partition became not only practicable but imminent, the Pathans threw in their lot with Pakistan. Even today, when they are governed by men of their own religion, they are restless neighbours, as Pakistan has already found, difficult to lead, impossible to control. Moreover, Afghanistan still tends to hanker for the valley of Peshawar and other Pathan territories; the call for ‘Pakhtunistan’ is largely inspired by Afghan irredentism and not seriously echoed today east of the Durand Line. Some of the powers and interests that have played battledore and shuttlecock with and across the Indus valley Pathans for so many centuries may still wish to continue the game, but it seems that the Pathans themselves are opting out. Not long ago a local tribesman told a Pakistani official that he had been bribed to blow up Peshawar University in the interests of ‘Pakhtunistan’. ‘Will you do it?’ the official asked. The Malik roared with laughter. ‘How can I?’ he said. ‘My son and daughter are due to take their degrees there.’38

Out of his long experience with the Pathans, and his understanding and love of them, Sir Olaf Caroe concludes: ‘The Pathan future is not in doubt; it lies, as it has always lain, with the people of the Indus Valley.’39
The Indus runs wide and shallow across the upland plain east of Peshawar. Not for long, however. Immediately below the point where the Kabul River pours its thick brown waters into the grey Indus the plateau falls away and at the small town of Attock the Indus must once more gather itself tightly together to force a channel down between a series of rocky hills. Here, where the steep gorge is little more than 200 yards wide, the grey water and the brown suddenly mix in a single swift torrent to pour smoothly down in winter, making a continuous rushing, swishing noise like a big bird swooping close. In summer, with the glacier sluice-gates open in the high mountains, the river washes fifty feet further up the cliffs and roars through like a galloping horse, splashing and swirling and foaming in a confusion of grey-green eddies. So impressive is it here that its local name is Abasin, or Father of Rivers.

Five hundred years before Christ was born Darius's sailor-explorer Scylax was swept through the Attock gorges. According to Herodotus he 'sailed down the river to the east and the sunrise to the sea'.¹ He probably built his boats and started his journey on the Kabul River near Peshawar; when he floated out onto the Indus above Attock he had over a thousand miles of river ahead of him. There are no detailed records of his expedition. Like later river travellers he must have rowed down, possibly setting sail when the wind permitted. What sort of boats did he build? How many men were in the party? There would have been wandering bands of robbers and brigands and as he was carried south down the river he must have had many anxious moments. Somehow he reached the coast and there he turned west past Arabia to fetch up near Suez two and a half years after leaving Gandhara.

Most of the early invaders of India had probably, like Alexander, crossed the Indus by ford or boat bridge at the shallows to the north of Attock. In the sixteenth century Akbar established a
regular ferry at the narrows. The crossing, though short, could be dangerous.

As the river has little breadth here [wrote a contemporary historian] it flows narrow and swift with great violence, so that the eyes of the beholders cannot rest firmly on it and the sight of onlookers grows dim. Its dashing waves turn the bile of fish into water, and break into fragments the rocks and black boulders upon which they beat . . . The rapidity of the current makes boats travel quickly and arrive at the opposite bank in the twinkling of an eye.2

Khushhal Khan described the travellers who

Must cross by the Attock ferry, trembling the while with fear,
For Indus takes his tribute from pauper, and prince and peer.3

Ferry boats were often dashed against the rocks and in particular against a couple of large black rocks on the right bank named after two heretics whom Akbar had caused to be thrown into the river at this point.

Throwing heretics into rivers was not Akbar's usual practice; on the contrary, his reign was marked by an exceptional tolerance in religious matters. He was born a Moslem, but, as a Moslem historian remarks disapprovingly, 'he was completely taken in by the idea that truth must be sought in all religions'.4 He consulted Hindus, Zoroastrians, and even two Jesuit priests from Goa who visited him in 1580 and almost succeeded (or so they believed) in converting him. In the end he came near to creating a new religion based on the concept of his own imperial sanctity and, from his time on, the heads of Mogul emperors in paintings were always surrounded by a halo.

Akbar arrived at Attock in June of 1581; at that season the Indus was running too fast for a bridge of boats to be anchored and after a long delay, spent camping beside the river in scorching heat, during which he hunted and engaged in theological discussions, the huge army, which included several thousand cavalry and more than 500 elephants, was ferried across. This particular expedition was successful in the short run, but the tribes were soon in rebellion again and Akbar decided to build a permanent fort at Attock. Finished in 1586, it commands the narrows of the Indus and its high crenellated curtain walls, over a mile in circumference, sweep down to the river banks from the hills above. Over one of the gates still stands the inscription 'Shield of the Monarchs of the World, King Akbar, may God enhance his splendour, Allah-o-Akbar, God is Great!' Today it is a
Pakistani army base, for its position makes it vital to the security and communications of the country. According to a nineteenth-century British administrator, Attock 'is supposed to take its name from a Sanscrit word, signifying prohibition or hindrance; "thus far shalt thou go and no farther"'.\(^5\) It is not a very good name, taken literally, since in spite of the hazards of the crossing, the Indus has never been an absolute barrier at Attock.

Forty years or so before Akbar built his great fort Sher Shah had driven a road right across his Empire from Calcutta via the capital in Delhi, Lahore and the small town of Rawalpindi to his own homelands in the Kabul valley. It crossed the Indus near Attock. In turn Afghans, Moguls, Sikhs and British crossed the Indus at the same place in their various campaigns. On the west side Sher Shah's Grand Trunk Road, following the green Kabul valley to Peshawar, is pleasantly shaded and hoopoe-haunted. Eastwards from Attock, in contrast, it winds through red and eroded country. Wherever water has been trapped in stagnant ponds, water-buffaloes, wallowing to their ears, poke their shiny black heads and wide pink nostrils above the greenish scum, women wash clothes and small boys splash each other. To the north the ancient east-Indus staging-post of Taxila, the city of Alexander's ally, is now only a geometry of broken, stony walls in rough grass. A new town has grown up nearby. It is dry country but at Hasan Abdal, twenty miles east of Attock, clear springs well out of the ground. Here the Moguls, always great gardeners, built channels and basins to irrigate trees and sweet-smelling shrubs and broke their journeys to Kashmir or Kabul to rest in the green shade they had made.

Akbar's son Jahangir used to sit by the waterfall and amuse himself 'by catching fish and putting pearls in their noses and then again releasing them to swim'.\(^6\) Both the Moslems and the Sikhs later built shrines there and in 1872 a not very impressionable British officer (Bindon Blood, later to be Churchill's commanding officer in the Malakand campaign) found Hasan Abdal a 'delightful and most romantic spot'. It had its drawbacks, however, as he discovered when a terrible swarm of red locusts descended, two to four inches long. The sun was completely obscured for three days and when they left 'every green thing had disappeared'.\(^7\)

Rawalpindi, twenty miles farther east, has also seen the passage of innumerable rulers, soldiers and travellers of different faiths and nationalities. The waterfalls and basins of Hasan
Abdal are now in decay; the barracks of Rawalpindi are not. The British made an important military centre there and built thick-walled bungalows with high ceilings for their wives and families. The soil is red as brickdust, or yellow as sand, but the monsoon gives enough rain to nourish poplars and palms, bougainvillaea, jasmine, wild buddleia and marigolds. Along the curving Mall, where carriages once trotted briskly and cars now fight for precedence at the gates of the Intercontinental Hotel, stand cassia trees, dripping with flowers as thick and golden-yellow as scrambled eggs. The old British barracks, enlarged and extended, are one of Pakistan's principal military bases. Islamabad, Pakistan's new capital, a declaration of national pomp and pride, is under construction a few miles further east. Grand white government buildings and embassies line avenues in one district, thin grey bungalows and blocks of flats crowd streets in another; the new bazaars are already as crowded and colourful and strong-smelling – that unforgettable mixture of dust, drains and curry-spices – as anything in the older towns to the west. As in Tarbela signposts stand in empty spaces pointing to the sites that will one day be filled by more ministries and embassies. Beyond Islamabad the steep Murree Hills (where Younghusband was born) are clothed in pines and deodars, and cool and green-smelling for a summer weekend's leave. Beyond them again is the old road the Moguls and British used to take, when India was one, to Kashmir.

For the British army officer 'Pindi' was a pleasant and well organized station. There were clubs and golfcourses and hunting in the nearby hills. In the worst of the heat they took their families north to the foothills of the Himalayas or east to the lakes of Kashmir. They kept busy with parades and ceremonials and the Pathans inspired a sufficient number of small engagements (for which the army generally felt grateful) to prevent boredom.

For the wives, of course, the situation was very different; they had no prancing horses and no exciting forays. Their houses were cared for by excellent servants; so were their children until they reached school age and were packed off to England. The wives had very little to do. They wrote letters home, they embroidered, sometimes they painted. A few studied botany or birds, but 'blue-stocking' was a label to avoid. So they gave teas to each other and organized dinner parties and picnics. They tried to make gardens, as English as possible in such drought and heat, but even when the gardens were full of flowers and birds the women were, as Kipling saw, often desperately homesick:
My garden blazes brightly with the rose-bush and the peach,  
And the Koil sings above it, in the siris by the well,  
From the creeper-covered trellis comes the squirrel's chattering speech,  
And the blue jay screams and flutters where the cherry sat-bhai dwell.  
But the rose has lost its fragrance, and the koil's note is strange;  
I am sick of endless sunshine, sick of blossom-burdened bough.  
Give me back the leafless woodlands where the winds of Springtime range—  
Give me back one day in England, for it's Spring in England now!8  

In Rawalpindi, in Peshawar, in a dozen frontier towns, lie the graves of British soldiers and of their wives and children. One of the most moving of their cemeteries is small, containing only about a hundred graves. It lies in a fold of the hills above the Indus near Akbar's fort. The thin soil grows a coarse thin grass. The cemetery's stone walls are dilapidated, the memorial stones are falling down and young bullocks search for grass between the graves. It is utterly neglected. The Pathans are allowed to plough up their own dead after seven years: why should they bother longer with foreigners? And all round Attock and on the opposite bank of the Indus their own graveyards stretch for acres and acres. The British cemetery is forgotten, but it is not dismal. The Indus sparkles beyond it, children play on the surrounding slopes, cattle wander freely. It is pervaded with peace, even contentment, like an old village churchyard in England.

The coats of arms of the British regiments who fought on the frontier over the years are let into a rock on the right bank of the Indus opposite Attock, and Pakistan has not yet removed them. More men died of disease than in battles; malaria, dysentry and cholera were ever-present. Bindon Blood was rather oddly instructed that if cholera broke out in the troops they should 'disregard every other consideration and march at right angles to the prevailing wind, moving every day'.9

Promotion was often fast in India because of the casualty rate from sickness:

We've got the cholerer in camp — it's worse than forty fights;  
We're dyin' in the wilderness the same as Isrulites;  
It's before us, an' be'ind us, an' we cannot get away,  
An' the doctor's just reported we've ten more today!  
't would make a monkey cough to see our way o' doin' things —  
Lieutenants takin' companies an' Captains takin' wings,  
An' Lances actin' Sergeants — eight file to obey —  
For we've got lots o' quick promotion on ten deaths a day!10
The Attock cemetery records many deaths of wives and even more of small children. 'Mary. Born 8th July 1880. Died 2nd August 1880.' 'Dear little Ethel aged three months and twenty-eight days - 1879.' 'In memory of little Nelly born 19 February 1886, died 4 June 1886.' Of the larger headstones, mostly cracking and broken, two that are still legible show that the military dangers of the frontier were not confined to actual fighting:

In memory of Pte. Thomas Morris H.M. 98th Regiment Who departed this life on the 5th November 1859 at the age of 26 years 9 months after much suffering through severe injuries received by the accidental discharge of a gun during the firing of a general salute at Fort Attock. In the midst of life we are in Death.

Sacred to the memory of Pte. Micheal [sic] Cavanagh 79 Cameron Highlanders who died at this Station on the 1st May 1882 Aged 22 Years From the effects of severe injuries received from the accidental explosion of a gun while Firing a Salute to the Lt. Governor of the Punjaub This Tomb was erected by the officers of the Detachment, Non-Com'd. Officers and Privates of his Company as a token of Esteem to his Memory and regret for his Untimely Death. Be ye ready also.

At Attock, Akbar's fort dominated the Indus for over 200 years but in the early years of the nineteenth century the Sikhs, extending their empire northwards from Lahore under Ranjit Singh, built a second fort on the opposite side of the river at Khairabad. There is little left of it now, but for a long time the two forts, garrisoned sometimes by the same army, sometimes by allied armies, sometimes by enemies, faced each other across the narrow rushing Indus.

In 1832 the Scots explorer Alexander Burnes arrived at Attock from Delhi on the first stage of the journey to Bokhara that was to make him famous. He had then been in India for eleven years and had already made something of a name for himself. Burnes was the son of the Town Clerk and Provost of Montrose, a respectable citizen himself but distantly related to the gay and lusty poet Robert Burns who wrote a hundred love songs to a dozen different women and thought:

Life is all a variorum
We regard not how it goes:
Let them cant about decorum,
Who have character to lose.11
Alexander seems to have inherited qualities from both these two very different personalities. Hard-working, intelligent, ambitious, self-confident, physically tough: he was all these, and also romantic, adventurous, pleasure-loving and self-indulgent. His life was to prove short but full and exciting. Above all he enjoyed himself. He enjoyed good health, good food and women. His portrait shows a full, ruddy face with a wide brow, heavy nose, large liquid eyes set far apart, a voluptuous mouth and a pointed and dimpled chin.

At school Burnes’s book-work was undistinguished; he showed no interest in foreign countries or military service, but found himself in the East India Company’s army through an accident of family influence. When he was sixteen he sailed for India with his elder brother. The two brothers were separated almost at once. Like many other people, Alexander found in India an exciting and rewarding outlet for his energies. Within a year he had mastered Hindustani and Persian and was tackling Arabic. He studied the manners and customs of the people as well as their languages. Extrovert though he was he worried about his own character at this time: ‘I lead a happy life, much more so than the generality of my companions but I entertain different ideas of religion daily, I am afraid they will end in my having no religion at all. A fatalist I am but no atheist, no nor even an agnostic. No – what shall I call it – a sceptical blockhead whose head filled with its own vanities imagines itself more capable than it is.’12 He gambled, lost half a year’s pay, cannily continued until he had won it back; and then gave up gambling. Because of his proficiency in Persian he was appointed as interpreter to a military expedition in Sind; exploring and surveying were new to him but he took to them with relish. From then on his great ambition was to travel and the Company allowed him plenty of scope for it. His name, he thought, was a definite advantage in the Indus area and the countries west of the river, because Alexander the Great was still remembered there; he himself was known as ‘Sekunder Burnes’.

Eight years after landing in India Burnes transferred from the army to the political branch of the Company’s service. Thanks to the success he achieved on diplomatic missions to the Amirs of Sind and to Ranjit Singh, his superiors in 1831 sanctioned his proposal to travel up the Indus valley and across it through Afghanistan and Persia to Bokhara, the Caspian Sea, and Teheran, and then back to India via the Persian Gulf. He was then twenty-
seven years old and accompanied by one British surgeon from the Bengal army, James Gerard and a Hindu gentleman, Munshi Mohan Lal, who seems to have acted as a secretary. After a month's hunting and feasting at Ranjit Singh's court in Lahore, where it seems that Burnes earned the Maharajah's good opinion of him by drinking as much distilled spirit as the Maharajah himself, the party headed west. They crossed the Ravi, the Indus tributary on which Lahore stands, promptly gave away or destroyed most of their baggage and the fine European clothes that Burnes and Gerard had needed at the Sikh court, and prepared to live in the fashion of the countries they were to pass through. They donned robes, turbans and sandals. Only one saddlebag was allowed for each man's gear; there were only five riding and pack animals and only mats to sleep and sit on. The contrast to the luxuries of Lahore was not easy to accept at first, as Burnes acknowledged. It gave him 'a curious feeling to be sitting cross-legged, and to pen a journal on one's knees'. But he was young and ambitious and 'custom soon habituated us to these changes; and we did not do the less justice to our meals because we discarded wines and spirits in every shape, and ate with our fingers from copper dishes without knives and forks'. Near Attock, according to the local Sikh commander, Ranjit Singh, battling the Afghans, had forded the Indus. Like schoolboys, Burnes and Gerard decided they must do the same. They borrowed an elephant from the Sikhs, and 200 horsemen, and rode to the river. It was March and the Indus was only beginning to rise, but it looked alarming close-to: 'The stream was here divided into three branches and in the two first gushed with amazing violence. I did not like the appearance of the torrent; and though I said nothing, would have willingly turned back; but how could that be, when I had been foremost to propose it?' The elephants managed it somehow, struggling through the rushing, freezing water like Arctic trawlers in a gale, slipping on the treacherously smooth underwater rocks, screaming with fear. The cavalry, at Burnes's insistence, went no further than the first island, by which point the river had already swept some of them away. The expedition returned with difficulty to Attock to find the fort and ferry now in the hands of mutineering soldiers who, not having been paid for some time, saw no reason to assist the Maharajah's friends, and Burnes spent two days in negotiation before his party was set on its way to Afghanistan. At the first stage, the Indus ferry at Attock, 'the splashing of the water is heard at a
distance of three miles, and deafens the people who cross it' wrote Munshi Mohan Lal. On his return to India he was to find that his relations considered him a 'Musulman . . . in conse-
sequence of crossing the Indus, or the forbidden river'. So 'Thus far shalt thou go and no farther' was evidently an injunction on Hindus rather than a statement on strategy.

Burnes was back in Attock five years later with an officer of the Indian Navy, Lieutenant Wood. With a mariner's eye Wood surveyed the arrangements for crossing the river. A boat-bridge connected the two sides of the river in the winter months; in summer the river ran so fast that the bridge had to be dismantled. Immediately downstream from Akbar's and Ranjit Singh's forts twenty-four boats were sufficient but thirty-seven boats were necessary higher up. They were anchored separately by a system that Wood described as

the very worst thing that could be imagined, and which has no other recommendation than its antiquity, and perhaps the ease with which it can be dropped from the boats. The figure is pyramidal; a skeleton of wood filled with stones. These uncouth things, when once let go, cannot be recovered; and as the strength of the bridge is not proof against that of the current in June, July, August and September, a new set has to be made as often as the bridge is required to be constructed. Now, were a line of mooring anchors once laid down in place of these baskets, and beyond chain bridles attached to them, a bridge of boats could be put together in about as many hours as days and weeks are now consumed in preparations.

It was indeed an antique arrangement, for centuries earlier Arrian, describing the Roman way of bridging by boats, which may well have been used by Alexander on the Indus, had written that the anchors they used were 'pyramid-shaped wicker baskets filled with rough stones'. But when Burnes and Wood reached Attock there was no bridge of boats. The river was in full flood. The ferry boat 'rolled and pitched with violence, and one man began to blow into a skin with which he had provided himself, and to invoke his saints'. Some improvements were later introduced. Fifty years after Lieutenant Wood's strictures on the methods of anchoring the boats (and possibly as a consequence of them) Bindon Blood found a 'fine bridge' of boats at Attock with 'permanent anchorages'. Even so, it was still necessary to use a ferry in summer.

At last, in 1883, the British built a permanent bridge over the Indus at Attock. It stands more than a hundred feet above the
river in order to be clear of the water in case the breaking of an upstream glacier-dam or rockslide should send another bore raging across the plateau and funnelling down into the Attock gorges; even so the bridge has been very nearly submerged more than once. The Tarbela Dam should reduce the danger of its flooding, but it was very real to the nineteenth-century engineers. Their bridge was dual-purpose, railway above, road below. By 1921, reported a historian of the railways, parts of the bridge had become overstressed and distorted and had to be strengthened and even reconstructed. Traffic to the North West Frontier was heavy and could not be suspended; the operation was therefore 'particularly difficult because it had to be executed entirely during the intervals between the passing trains, the maximum uninterrupted time available being three hours and usually only about one hour'.

Because of its importance the bridge has always been guarded by soldiers at both ends, once British, today Pakistani. It looks old-fashioned now, and frail as a primitive Meccano construction, but it still carries a great weight of traffic across the Indus. There is no longer any need for a ferry at Attock. Ranjit Singh’s fort at Khairabad is a ruin. But Akbar’s fort still stands over the black cliffs of the narrow gorge, a statement of Mogul ambitions, a frowning guardian of the river.
Akbar’s great-grandson Aurengzeb lived to be ninety, in spite of the maledictions of Khushhal Kahtak. The son who succeeded him, Bahadur Shah, was therefore already an elderly man when he first sat on the Mogul throne and his short reign was a more or less continual battle, against his brother, against insurrections in central India, and against the Sikhs in the Punjab. At his death in 1712 the Mogul Empire, although it retained the show and panoply of power for many years and was not formally overthrown until 1858, began to disintegrate.

It had never been very firm in the north-west; neither Akbar’s forts nor the various contracts he and his successors had agreed with the tribes at different times could ensure peace and stability beyond the Indus. As the central power weakened the frontier sputtered like a fuse. Nadir Shah, King of Persia, sweeping across mountains and rivers towards Delhi in 1738, met serious opposition only from the Pathan frontier tribes: and they were too disorganized to stop him. He held the Indian capital for a short time and when he left it his loot included the Peacock Throne and the Koh-i-Nor diamond, which had been a Mogul treasure for 200 years. Nadir Shah was murdered a few years later, upon which one of his captains, Ahmad, not only gained possession of the great diamond but succeeded in establishing himself as the first independent ruler of Afghanistan. Between 1747 and 1773 Ahmad Shah, who affected pearl earrings and assumed the title ‘Durr-i-Durrani’, or Pearl of Pearls, invaded India eight times, also reaching as far east as Delhi; moreover he temporarily defeated the rising power of the Sikhs and extended his rule as far as Sind, to the south, and Kashmir in the north.

For a short time much of the Indus valley from Ladakh to the Arabian Sea was under one rule. There is little evidence of this today. The Durranis chose always to return to Kabul rather than establish their headquarters in Delhi or Lahore; they crossed and recrossed the Indus but built nothing on its banks. In any case
their rule was brief, for Ahmad Shah's successor, who died in 1798, left twenty-three sons without naming an heir. In a series of struggles the brothers and half-brothers pitilessly betrayed, blinded and murdered each other and the Durrani Empire fell apart. Meanwhile the Sikhs were gathering strength lower down the Indus and looking north to Peshawar, and from the other side of India the Honourable East India Company was finally approaching the Indus.

For 150 years, power and action and reaction were to swing to and fro across the middle Indus as in the ancient Chinese game of battledore and shuttlecock; Afghans, Sikhs, Russians, British, Pathans, all batted in turn, all in turn found themselves being used by others. In the long tale of mutual misunderstanding, selfishness and treachery there are of course brave and even cheerful notes, but not very many. 'There is a fate about this restless frontier which has been too strong for mankind ever since the days when the Greek rulers of Bactria died fighting in face of the invading nomads.'

At the end of the eighteenth century the grandson of Ahmad Shah who had finally won the succession, infuriated by Sikh encroachments towards the Indus, crossed the river twice and destroyed Sikh shrines; on his second foray he was somehow persuaded to accept Ranjit Singh as his governor in Lahore. A few years later the 'governor' had crossed the Indus westwards, taken the valley of the Kabul River and sacked Peshawar, cutting down all its beautiful cypresses and mulberry trees. Innumerable battles and skirmishes were fought on the banks of the Indus and the Kabul Rivers. On one occasion the Sikhs crossed the Indus near Hund and inflicted a terrible defeat on the Pathan and Afghan tribes; many of the wide graveyards along the Kabul River date from this time. In another battle, near Tarbela, the Sikhs found themselves unable to ford or bridge the Indus, then deep and swiftly flowing, but one of the Europeans who had taken service under Ranjit Singh, a Frenchman, General Allard, led his cavalry over, swimming, fought his way down the west bank and recrossed the river at Attock. The Durranis managed to retain a loose suzerainty over the areas in the north-west but with the two forts on either side of the Indus in his hands, Akbar's and the one he had now built at Khairabad, Ranjit Singh controlled the Indus fords and ferries that were essential for communication.

For the moment the advantage clearly lay with the Sikhs.

But by 1826 a series of palace revolutions had thrown up a
new leader in Kabul, Dost Muhammed Khan, and the tribes beyond the Khyber rallied to him. Like most of his countrymen he was a warrior first and foremost and he knew all about intrigue and treachery. He was a born leader of men; unexpectedly he also proved to be a just and sensible administrator, gradually imposing a measure of order on his unruly country, and encouraging trade. One of the first Englishmen on the frontier described him as ‘tall, of fine physical development, and he truly looked a King. His manner was courteous while his keen eyes and vigorous conversation conveyed the idea of great determination combined with astuteness and appreciation of humour.’ Perhaps because he could neither read nor write it was important, as the British were to discover, to deal with him face-to-face and through an envoy of his own calibre.

Outside his immediate kingdom Dost Muhammed’s chief object was to regain the lands on the west bank of the Indus that the Sikhs had wrested from his predecessors, and in particular the Kabul valley. With his accession, therefore, the strife between Afghans and Sikhs intensified. Other players were soon to enter this game, and to complicate it.

By now the East India Company had been trading in the subcontinent for over 200 years. At first its activities had been restricted to the coastal districts of India, mainly in the south and east. Gradually, with the collapse of Mogul power, it was drawn inland, and northwards. It was always reluctant to raise its sights beyond a short-term view of trade and profit, as Moorcroft had found, to his cost. But, however unwillingly, or accidentally, or incidentally, the Company had in fact acquired an empire by the end of the eighteenth century. Some of its profits had so enriched individual Company servants that scandal in England had already compelled the British Government to assume a large measure of control over the Company’s policies. But London politicians, obsessed with Napoleon, could only see India as a liability, since it might possibly be invaded by France and her ally, Russia, through Afghanistan. The terms of the Treaty of Tilsit had leaked out (possibly deliberately) and although the French threat was eliminated with the defeat of Napoleon the Russian threat persisted.

For over a hundred years events in Afghanistan were followed closely and suspiciously by the British in case they might prove to be part of some Russian design against India. Even today Afghanistan and Russia, especially when working together, are
regarded askance by Pakistan. So many invaders have poured down to the Indus valley from the passes of Afghanistan that any government on the Indus is hypersensitive to movements originating beyond the mountains. In the 1830s Russian outposts began to edge south into the country east of the Caspian Sea. The British, aiming to stabilize India’s north-west frontier against these advances, hoped to quieten both Sikhs and Afghans; they were also anxious to promote trade along the Indus valley. In 1836 Alexander Burnes was sent upriver and on to Kabul in furtherance of these objectives.

His great journey to Bokhara and beyond had occupied 1832 and the first months of 1833. In June of that year he returned to England to find himself a lion of London society, a role he greatly enjoyed. During his travels to dangerous and practically unknown places, often passing as a native, he had recorded all he saw and heard in great detail, and he now published a book which immediately ran into several editions. He was given the Royal Geographical Society’s Gold Medal, interviewed by the King and fêted and honoured everywhere. For the aristocratic English in the post-Byronic age to be brave and handsome and to have travelled in the Orient were sufficient grounds for admiration.

When he returned to India in 1835, however, Burnes was disappointed to find himself in no better a position than when he left, for the British in India judged him more severely than had London society and many people thought him immature and too easily influenced. All the same, because of his languages, his knowledge of Afghanistan and his previous meetings with Dost Muhammed, he seemed the right person to represent British interests at Kabul.

Starting at the Indus delta in 1836, Burnes’s mission was at first directed to trade: ‘The objects of Government were to work out its policy of opening the river Indus to commerce, and establishing on its banks, and in the countries beyond it, such relations as should contribute to the desired end.’ With Lieutenant Wood he therefore travelled up the Indus as far as possible by boat, surveying the river and reviewing possible trading bases. But the most important ‘objects of Government’ were political rather than commercial. Burnes rode via Attock and Peshawar to Kabul and almost as soon as he arrived there was absorbed in political problems. Between the Afghans and the Sikhs the main issue, as always, was Peshawar and the Kabul valley and in this matter Burnes believed the Afghans had a strong case, an opinion the Governor-General (the East India Company’s senior official in
India) was at first inclined to share. Burnes therefore encouraged Dost Muhammed in his hopes. But when all was said and done the Sikhs were nearer to British India and their friendship was more important than that of the distant Afghans who in any case, with their long history of raiding into India, were of doubtful reliability. There really could be no question of ousting the Sikhs in favour of the Afghans. For a time Burnes continued to argue in favour of the Dost but the Governor-General’s decision had been taken: Peshawar must remain under the Sikhs. Moreover Dost Muhammed was known to be in contact with the Russians and although he was apparently quite frank about this with Burnes, and his early negotiations with the Russian agents who now turned up in Kabul seemed harmless enough, the very thought of Russian influence in any of the countries bordering India was always enough to induce something like hysteria in the British authorities there. Dost Muhammed looked potentially dangerous by now and they decided to get rid of him. Afghanistan had changed its rulers eight times in the previous forty-five years and one more change, directed to the British advantage, should not, it seemed, be too difficult to engineer. A suitable replacement was to hand: Shah Shuja, a man who had already once held the throne and an agreeably biddable person. In Kabul, Dost Muhammed realized that the British were turning against him and the Russian agents became increasingly favoured at the expense of the British.

There was nothing more that Burnes could do and he left Kabul in April 1838. On his return to India he made it clear that he still preferred the Dost: ‘He is a man of undoubted ability, and has at heart high opinions of the British nation: and if half you must do for others were done for him, and offers made which he could see conduced to his interests, he would abandon Persia and Russia tomorrow.’4 Earlier in the same memorandum, however, he had written: ‘The British Government have only to send Shuja-ul-Mulk to Peshawar with an agent and two of its own regiments, as an honorary escort, and an avowal to the Afghans that we have taken up his cause to ensure his being fixed for ever on his Throne.’5 Whether he wrote this in a last desperate hope of solving the Peshawar impasse (for Shah Shuja was known to be ready to give up all claims on the Kabul valley if reinstated) or out of a desire to be on the winning side in government circles, it was an unfortunate statement; the memorandum faces two ways and has often been quoted against him.
Probably it had little influence on policy, however, for only two months after Burnes left Kabul a triform treaty was already being signed between the British, the Sikhs, and Shah Shuja in which the first two parties agreed to favour Shah Shuja's return to the throne he had lost thirty years earlier while, for his part, he renounced all Afghan claims to the Indus territories occupied by the Sikhs.

The British intention was that the Sikhs should do most of the fighting involved in restoring Shah Shuja, while they themselves watched benevolently. But Ranjit Singh, whose forces had already been engaged with the Afghans for many years, knew very well how intractable the tribes were and was determined not to risk his own army against them in a major campaign. He was a very clever man. Somehow—exactly how the British authorities seem never to have grasped—the 'Army of the Indus' that crossed the river some six months later and marched for Kabul with Shah Shuja was far more British than Sikh. Afghanistan is hard, wild country to fight in, as the British soon found out. A story often repeated tells how a British soldier, informed that Afghanistan was a tableland, replied, 'Well, if it is a table, it is a table with all the legs uppermost.' But on the inward journey, in spite of the novelty of the terrain and climate, things went fairly smoothly for the British; by the summer of 1839 Shah Shuja had been re-instated in Kabul and the defeated Dost Muhammed, with his family, dispatched to exile in India at the expense of the East India Company.

Shah Shuja-ul-Mulk ('Sugar and Milk' the British soldiers called him) was certainly a very different man from Dost Muhammed and a lesser one. In his brief six-year reign in Kabul, he had been relatively merciful to his defeated enemies, and enjoyed the pomp and show of his power. During his long exile he had made several efforts to regain his throne, but—until 1839—they had all ended in failure. Elphinstone, the first British envoy to meet him (this was in Peshawar, his winter capital, in the days of his glory) described him as covered in jewels (one of them the Koh-i-Nor), crowned and dazzling, and the whole court rich, grand and formal. Shah Shuja himself was 'a handsome man... the expression of his countenance was dignified and pleasing, and his address princely... It will scarcely be believed how much he had the manners of a gentleman, or how well he preserved his dignity, while he seemed only anxious to please.'

Dignity and anxiety to please are not the qualities a ruler of
Afghanistan most needs, however; and Shah Shuja, re-enthroned but never accepted by the tribes, proved no more useful than a puppet to the British. But the British authorities on the spot behaved in such an extraordinary fashion that perhaps nobody could have saved him or them. It must be remembered, in their defence, that this was the first time the British had dealt directly, in numbers and in war, with the tribes to the west of the Indus.

As soon as Shah Shuja was back in his palace the army relaxed and settled down outside the walls of Kabul. Burnes, who had gone with it as assistant to the Political Officer, a position which he strongly resented and which left him almost nothing to do, installed himself in the town and entertained lavishly. "As the good river Indus is a channel for luxuries as well as commerce, I can place before my friends at one third in excess of the Bombay price my champagne, hock, madeira, sherry, port, claret, sauterne, not forgetting a glass of curaçao, and maraschino, and the hermetically sealed salmon and hotch-potch." More than a year later the army was still there. Wives, with children, had arrived to join their husbands, who had built houses and imported furniture. The seasonal sports of cricket, horseracing, skating, shooting and fishing were much enjoyed by the British officers, so, to the fury of the Afghans, was the perennial pursuit of their women; in this particular sport Burnes is supposed to have excelled and the Afghans who had received him twice before as a friend now started to turn against him. For the ordinary soldier life at Kabul was extremely unpleasant. One Indian sepoy, wretchedly cold in winter quarters, recorded that 'men lost the use of their fingers and toes which fell off after great suffering. The whole English army was in a miserable plight, since the men were worn out by continual fighting, guard duties and bad food.' Meanwhile, on the other side of the world, London was beginning to jib at the cost of maintaining the army at Kabul and ordering the withdrawal of troops and tribal subsidies. The tribes, increasingly resentful of an apparently permanent army of occupation, became first restive and then openly rebellious. Shah Shuja could neither control his subjects nor advise his British supporters, for his own position was precarious. Mohan Lal, Burnes's companion on the road to Bokhara, was with him in Kabul and issued repeated warnings that the situation was explosive, but he was ignored. When the tribes rose in force in November of 1841 Burnes and his brother Charles were the first to die, cut to pieces in the street near their Kabul house by the long Afghan knives.
Alexander Burnes was thirty-six when he was killed. In many ways he had been successful. In London he had cut a dash. But in India not everybody had liked him. Administrators and diplomats disagreed on his merits and achievements. His colleagues on his journeys say little about him as a man. Mohan Lal, describing the Bokhara expedition, writes with real affection about Gerard but hardly mentions Burnes outside business. Lieutenant Wood, the naval officer who accompanied Burnes on his second journey up the Indus, calls him ‘my well-fleshed companion’, paid him the deference due to a mission leader but is also silent about his personality. There may have been an element of jealousy in the unfavourable assessments of Burnes. One historian says that, ‘it was the hard fate of Alexander Burnes to be overrated at the outset and underrated at the close of his career’. In political matters he proved to be not always objective or clear-headed. But as an explorer he was brave, resourceful and observant. His services to geography, wrote a correspondent to the Journal of the Geographical Society ‘will be inadequately appreciated if estimated only by the positive additions which he made himself to our knowledge. He had the rare merit of being able to stimulate others to the taste of discovery.’

A few days after Burnes’s murder the army commissariat stores were taken by the Afghans. Incredibly, the British still temporized. Only after more murders and with a ‘safe conduct’ which they should have realized to be unenforceable, did they finally decide to retreat. In January 1842, at the worst possible time of the year, the British forces – 16,500 in all but only 5,000 fighting soldiers: the rest were women, children and camp followers – set out on the long march back to the Indus. Between freezing cold, starvation, knives and snipers’ bullets they died. A week after the army left Kabul one man, exhausted, rode into the frontier post west of Peshawar; of the rest all, except for a few prisoners and hostages whom the Afghans had treated honourably, were dead.

Six months later another British army, avenging this disaster, marched to Kabul through a pass south of the Khyber, rescued the surviving British prisoners, burnt the bazaar, and marched out. Shah Shuja had by this time been murdered by his own countrymen, so Dost Muhammed was collected from his exile in India and set back on his throne. The whole affair must have been incomprehensible to him.

This was the First Afghan War. It was a most lamentable
business. The stupidity of the politicians and the incompetence of the army had lasting effects. The Company's locally recruited soldiers had learnt that their British officers were not invariably wise and powerful and all of India now saw that the British were not invincible. Moreover, in the tribal countries west of the Hindu Kush 'Britain had aroused a heritage of hatred and distrust which has perhaps not entirely been dispelled from Afghan minds even to this day'. The British had solved nothing; in fact a hundred years of worry and work, frustration and fighting were just beginning.

Soon after the Afghan War the East India Company, still only partly controlled by the British Government, acquired control over the Indus provinces of the Punjab and Sind and its influence stretched as far north-west as Peshawar. It was now responsible for the administration of vast areas of India. Somehow it found the men - Lumsden, the Lawrences, Edwardes, Abbott, Jacob, Chamberlain, Nicholson and Mackeson - to begin the job of pacifying and organizing the tribal areas near the Indus. But in 1848 the Sikhs revolted against the British and from Kabul Dost Muhammed, seeing his former enemies occupied in fighting each other, determined to make another drive for Peshawar. He captured the town, the country to the south of the Kabul River, and the Sikh fort at Khairabad. Akbar's fort was in a key position in the fighting between the Sikhs and British. At an early stage Nicholson had galloped from Peshawar to secure it, so fast that only thirty of his men managed to keep up with him; he crossed the Indus and arrived just in time to prevent the Sikh garrison from closing the gates. As the war spread, blazing up in different spots like a forest fire, Nicholson seemed to be everywhere at once, dashing up and down the east bank of the Indus, repeatedly returning to Attock.

Meanwhile Dost Muhammed had unexpectedly entered into negotiation with the Sikhs. If they would confirm his overlordship of the Peshawar valley and other Indus areas, he suggested, he would help them to deal with the British. Only ten years previously the British had seen themselves as umpires in the match between Sikhs and Afghans. Now the positions were altered, but the new umpire was no more successful or patient than the previous one. Discouraged, Dost Muhammed abandoned his more or less neutral stance and sent horsemen to the Sikh colours. Unfortunately for him they arrived only in time to fight in the last battle of the war, when the Sikhs were decisively defeated,
and the British chased Dost Muhammed and his troops back across the Indus and right up to the Khyber Pass. Neither Afghan nor Sikh ever came back to the Peshawar valley, to the great satisfaction of the tribes, who hated them both.

For some years relations between the Dost and the British, according to the Governor-General, were of 'sullen quiescence on either side, without offence but without goodwill or intercourse'. In view of the history behind them, this is not surprising. But when the Crimean War broke out in 1854 and the Russian bogey loomed larger than ever, the British thought it advisable to mend their western fences. For his part Dost Muhammed was also ready by now to let bygones be bygones. In 1855 John Lawrence and Herbert Edwardes negotiated a treaty with him in which the British disclaimed any intention of territorial aggression against Afghanistan while Dost Muhammed promised to be 'the friend of the friends and enemy of the enemies of the Honourable East India Company'. A supplement to this treaty was signed in Peshawar in January 1857, providing for the payment of British funds to the Dost in the war he was then fighting against Persia; on his side, he guaranteed to defend his possessions and independence. Lawrence and Edwardes, both brave and honourable men, were responsible for the second negotiation, on behalf of the Government of India, as for the first, and it is fair to assume that Dost Muhammed was impressed by them for, although the treaties gave him less than he had hoped, his comment, on signing the second, was: 'I have now made an alliance with the British Government and come what may I will keep it till death'. He kept his word and it was lucky for the British that he did. It was lucky for them, too, that after two wars they had finally managed to come to terms with the Sikhs lower down the Indus. For in May 1857 the Indian Mutiny broke out.

It is sometimes called the 'Sepoy Mutiny'. Modern Pakistanis often describe it as 'the First Freedom Fight', Indians seem to be divided in their views. Discontent with foreign rule was certainly not confined to the army, though many native soldiers had lost privileges and were beginning to fear loss of caste. The independent princes in India trembled for their thrones. In Delhi the last Mogul was old and wanted only peace, but might still be used as a rallying-point. In many quarters, especially the more reactionary and fanatical, the changes and reforms the British had introduced were resented. Some of the local practices,
such as widow-burning (*suttee*), strangling of travellers (*thuggee*) and female infanticide were horrible, by any standards, but they were deeply-rooted in the religious beliefs of the country and the British were not patient or tactful in eradicating them. ‘The emotional background’ to the Mutiny, writes a British historian, ‘was a vague and incoherent feeling of protest, to be found among Hindus and Muslims alike.’\(^{15}\) A Moslem historian says ‘the rebellion cannot be termed as a mutiny. The soldiers were joined by the civil population, and the revolt spread over large areas of the subcontinent. The leaders of the sepoys came from both the communities, Muslim and Hindu. Sympathizing with the cause of the sepoys, the people rose simultaneously.’\(^{16}\) But an Indian considers that ‘to describe the revolt as a national war of freedom and independence, waged by a populace growing under a sense of injustice and aggression, is nothing short of a travesty of history’.\(^{17}\)

Unquestionably there was a tinder of discontent in India then and the British, ignorant or careless of their own troops’ susceptibilities, sparked it into fire by the introduction of new cartridges greased with cow and pig fat and therefore anathema to both their Hindu and Moslem soldiers. At Meerut, near Delhi, the native regiments flamed into open mutiny.

Near the Indus the fire was sporadic and quickly controlled. There were few insurrections and they were dealt with ruthlessly. In one garrison town in the Kabul valley the British Commanding Officer objected to the disarming of his regiment, swearing that he would ‘stake his life on their fidelity’, he did exactly that, for he shot himself when their treachery was proved. Two months earlier he had told Roberts (later Field-Marshal Earl Roberts of Kandahar) that he had served all his career with cleanshaven ‘Hindustani’ soldiers and he intensely disliked the Sikhs who were being recruited by the British army. Their religion forbade them to cut their hair or beards and ‘they quite spoil the look of my regiment’.\(^{18}\) But it was the Hindustanis who mutinied while the Sikhs remained loyal to their salt. Edwardes, then Commissioner at Peshawar, in agreement with the military commander there and overruling agonized protests from the British officers, decided to disarm four of the five native regiments. An early morning parade was held, at which the European troops, their rifles loaded, were disposed in such a way as to make it impossible for the native soldiers to resist when the order ‘Pile Arms’ was given. In their shame and fury some British
officers threw down their own swords and spurs on the heaps of their men's weapons. The tribes had been watching and waiting for British reactions, anxious not to find themselves on the losing side. After the disarming, wrote Edwards, 'friends were as thick as summer flies and levies began from that moment to come in'.

Within a very short time the British officials near the Indus were able, with a fairly easy mind, to send most of their troops east to the main centres of insurrection. The Guides, an irregular force of Pathan volunteers only recently formed, marched the 580 miles from the Kabul valley across the Indus to Delhi in twenty days under the appalling summer sun. (The heat was so dreadful in the first months of the Mutiny that many soldiers on both sides died of heatstroke.) From the British troops and the Pathans that now volunteered, a 'mobile column' was formed and dispatched to Delhi under Nicholson.

His is perhaps the best-known name in the roll-call of the early British soldier-administrators on the Indus. John Nicholson was tall, bushy bearded and steely eyed. In the frontier country his imperious rule, his courage, energy and unassailable integrity had already made him a legend among the Pathans and he was even worshipped as a saint by a small group of men who called themselves the Nikal-Seyni Faquirs. In the Sikh wars he had charged up and down the Indus valley; now, as a brigadier, he galloped eastwards across the Indus to relieve the siege of Delhi. A few weeks later, leading his troops in the recapture of the city, he was killed. He was only thirty-four, and his heroic death gave extra glamour to his name. But as a human being he is not altogether attractive: too haughty, too self-righteous. Halfway between Attock and Rawalpindi stands a tall plain column, like a lighthouse, stiff and severe as Nicholson himself. A tablet let into the rock beside the road below reads: 'This column is erected by friends, British and Native, to the memory of Brigadier General John Nicholson, who after taking a hero's part in four great wars for the defence of British India [here they are listed] being as renowned for his civil role in the Punjab as for his share in its conquest' fell at the great siege of Delhi 'mourned alike by the two races with an equal grief'. Another recently placed tablet says coldly: 'Nicholson was killed at Delhi in 1857 by the Freedom Fighter named Kale Khan.'

With cruelties almost as vicious and savage as the mutineers' atrocities the Company, by the end of 1858, had stamped down
the Mutiny. It is difficult to see it as a real ‘Freedom Fight’ or even a fullscale military mutiny. The British had been scattered in small pockets over the huge area of the subcontinent. Their European troops consisted of some 40,000 men. Their Indian soldiers were by then 300,000 strong. The total population of India was about 200 millions. If there had really been a widespread determination to rid India of the foreigners it is inconceivable that a single Englishman could have survived. It was after all a comparatively small-scale affair, fought bitterly and gallantly, but restricted in scope and numbers. The mutineers were mostly from the Company’s Bengal army and many other Indian soldiers fought against them on the British side. Large areas of India, untouched by the Mutiny, remained peaceful throughout.

In the aftermath of the Mutiny the British Government took over full and open responsibility for India; the India Act of 1858 provided that ‘the territories in the possession or under the government of the East India Company . . . and all powers exercised by the Company . . . shall become vested in Her Majesty’.

The Company which had acquired and effectively administered more territory in India than Ashoka or Akbar, accepted its death with pride and dignity:

The Company has the great privilege of transferring to the service of Her Majesty such a body of civil and military officers as the world has never seen before. A government cannot be base, cannot be feeble, cannot be wanting in wisdom, that has reared two such services as the civil and military services of the Company . . . Let Her Majesty appreciate the gift – let her take the vast country and the teeming millions of India under direct control; but let her not forget the great corporation from which she had received them.

The change made less real difference than might have been expected, for the British Government had in practice controlled Company policies for years. What was of more immediate and also long-lasting importance was the deep mutual distrust between the British and the Indians that the Mutiny left behind it. From then on, for years, rulers and ruled drew even further apart, seeing each other’s aims and actions distorted by a fog of suspicion.

The Indus tribes on the North-West Frontier were fully acclimatized to mistrust and suspicion and for them the new regime was only a new version of the old story in which foreigners marched backwards and forwards through their territories. To
the tribesmen who might join one or other side as it suited them the purposes of foreign invaders were entirely irrelevant, but could possibly be turned to profit for themselves. The game that had been played across their mountains and valleys for so long continued. Earlier protagonists, such as the Sikhs and the Afghans, had either faded out of the picture or been driven back, though the Hindu Kush frontier between the Kabul valley tribes and Dost Muhammed’s territories was still far from clear. Now the players were Britain and Russia, and what they were playing, as in the high mountains beyond Baltistan, was the Great Game.

Among the British there were two schools of thought about the protection of the North-West Frontier against Russia. Supporters of the ‘Forward Policy’ held that the frontier should be pushed west to the Hindu Kush, where there were only a limited number of passes available to an invading army and these could be readily defended. This strategy was likely to be expensive, however. Much later Kitchener estimated that ‘holding the line of the Hindu Kush would require, among other things, no less than three million camels’.22 The ‘Close Border’ party, on the other hand, thought the Indus itself, or perhaps the hills that bordered the narrow plains immediately west of the Indus, should be the limit of British India. Within the context of the main game therefore the protagonists of one side, over the years, played another game between themselves. Sometimes the British advanced, sometimes (for no reason apparent to the tribes) they retreated.

In the early days of the Mutiny John Lawrence, in Lahore, had gone so far as to propose that the lands on the west bank of the Indus be allowed to revert to the Afghans and although he had been firmly overruled by the Governor-General (‘Hold on to Peshawar to the last’23) and had loyally supported him, Lawrence continued to believe the frontier should be on or near the Indus. The concept of the Close Border governed British relations with the tribes on the west bank of the Indus for twenty years. Advocates of the Forward Policy had had occasional brief moments of influence but it was not until the 1870s, when the Conservatives were elected to power in London under Disraeli, that they assumed charge of policy on the frontier. The Russians were again extending their power in a direction that the rulers of India could only regard as threatening. The slow advance of the Russians, often interrupted and often only half-deliberate, had been forced on them by the same pressures that
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had led the East India Company, and then the British Government, to become involved with the Pathans and Afghanistan. In 1864 the Russian Chancellor formulated his country's relations with the tribes on its borders in terms that any British official in India would have readily understood: 'The position of Russia in Central Asia is that of all civilised states which come into contact with half-savage, wandering tribes possessing no fixed social organization. It invariably happens in such cases that the interests of security on the frontier, and of commercial relations, compel the more civilised states to exercise a certain ascendancy over neighbours whose turbulence and nomad instincts render them difficult to live with.'

This may be a politically justifiable attitude but in practice ascendancy over 'half-savage' tribes is not easy to achieve. They usually detest foreign domination, they know their own terrain, they can live harder than any sophisticated army, and they are brave fighters. Sir Olaf Caroe considers that 'the continued political freedom of the tribal belt is mainly owing to the love of liberty of the tribesman, his readiness to defend it, and his capacity as a fighter on his own ground.' It must also have a great deal to do with the quite appalling difficulties, for outsiders, of the tribes' 'own ground'. In turn Russia and Britain, like the Moguls before them, found out the hard way that the tribes west of the Indus may be briefly conquered by sheer force of arms but never controlled for long.

In 1877 war broke out between Russia and Turkey in which Britain was very nearly involved on the Turkish side. Responding to British naval movements in the Mediterranean, Russia advanced troops towards the Afghan border and sent a mission to Kabul. In India, the British immediately raised their sights to the Hindu Kush. When their envoy was refused entry to Afghanistan they began to prepare for war. A British mission with an escort of Guides was then accepted in Kabul; a few weeks later they were set upon and murdered, almost to a man. Three British armies promptly crossed the Indus westwards (of which one was under the command of Roberts) and not without narrow escapes from disaster succeeded in occupying Kabul. This was the Second Afghan War.

Gladstone replaced Disraeli in 1880 and the Forward Policy abruptly fell out of favour. The new Secretary of State for India had the lowest opinion of his predecessor's policy vis-à-vis Afghanistan: 'as a result of . . . the employment of an enor-
mous force, and of the expenditure of large sums of money, all that has yet been accomplished has been the disintegration of the state which it was desired to see strong, friendly and independent.\textsuperscript{26} It was clearly impossible for the British to stay long in Afghanistan, if only because the maintenance of an army there was so costly. Fortunately a new ruler now appeared in Kabul, Amir Abdur Rahman Khan, who was both acceptable to his people and not unfriendly to the British. The British withdrew thankfully and in 1885 a treaty of friendship was signed between the Amir and the British. The Afghan–Russian frontier was more or less determined, the Durand Line between British India and Afghanistan was agreed. By the end of the nineteenth century Afghanistan was relatively stable and able to fulfil the vital function of acting as a buffer state between the Russian and British empires; but its foreign policy remained, by agreement with the British, under the latter's ultimate control. Only once more, in 1919, were relations between Afghanistan and the British in India to be seriously disturbed. Seeking to unite his own subjects, for he had alienated both his army and the religious leaders, King Amanullah of Afghanistan launched a \textit{jihad} or holy war into the Kabul valley. This was the Third Afghan War. Although on balance the British were victorious in arms they knew that conditions in Asia were changing. Russia, in the throes of its great Revolution, no longer presented a threat. Afghanistan was therefore released from the obligation to conduct its foreign affairs under British supervision. The last open match between Afghanistan and Britain had been played, though frontier skirmishes continued until Partition. Today it is up to Afghanistan and Pakistan to maintain a balance of peace in the tribal areas on their common frontier west of the Indus.
Between Attock and Kalabagh, a hundred miles downstream, the Indus runs along the bottom of a deep trench through rocky country as dramatic in its way as any it has so far passed, often beautiful, sometimes ugly and fascinating as a map of the moon, usually harsh, sometimes green and gentle. On the west bank the Tirah hills, running down from the heights of Afghanistan, throw out innumerable small spurs towards the Indus. The ground is rocky, rust-red and beetroot-red, eroded into gullies, scattered with Pathan graveyards. In the spring months mustard, a tough plant, patches the hills with brilliant yellow, and drifts of pale-blue and mauve flowers carpet the rocks. A green line marks the wandering path of the Indus, running well below the level of the brown surrounding country. The occasional habitations are square and windowless as fortresses; but away to the west sizeable townships huddle into the shelter of the mountains. In places the country flattens out and queer isolated lumps of rock stand about, ridged like the spines of prehistoric monsters or shaped into domes and towers and spires. On the east bank of the river a wide upland stretches to distant mountains as blue as amethysts; wild tulips such as Babur loved, red outside and white inside, grow here in spring, and the bright air is full of singing larks. There is petroleum in this region, and some coal and iron; archaeologists have recently discovered traces of prehistoric towns whose economy depended on iron smelting. The main industry, however, is agriculture, and although in such soil the crops are generally thin they provide a sufficient living for the few people who live there.

The countryside is empty, compared with the Kabul valley. Even near the Indus there are long spaces between the villages. Occasionally a ferry boat links the trails that converge on the river, carrying donkeys and vegetables, veiled women and turbanned men from bank to bank. The rare buildings—a ruined stupa or temple, a cluster of mudbrick huts—are built
high, like the Attock bridge, to be out of reach of the flood waters; for even here, a thousand miles from its source and at last beginning to flatten out on its last step down to the plains, the Indus is violent in summer. When Burnes arrived at the town of Kalabagh, coming upstream in 1837 after his survey of the lower Indus and en route to his abortive diplomatic discussions with Dost Muhammed, he found the river unnavigable from then on.

Lieutenant Wood had sailed, rowed and tracked up the Indus fairly easily as far as Kalabagh. Here the hills close in and the river narrows. Burnes had hoped to continue on by boat up to Attock but it was July and the river was in spate. With a south wind they at first ‘stemmed the river merrily’ but then ‘losing the wind, we found the stream too rapid for the track-rope, and were obliged to return’. Burnes decided to continue overland and took a week to ride up to Attock in terrible heat: ‘We lay gasping all day, stretched out beneath tables as a protection, and at sunset the mercury did not sink below 100°!’ Lieutenant Wood, the sailor, ‘resolved to stand by his own element as long as there was any prospect of success’,¹ and set off in a solid boat manned by thirty-seven men. The vessel carried no mast or sails, for the winds in this reach of the Indus were known to be variable and the channel narrow. His crew tracked only a third of the way to Attock at which point most of them deserted. He resolved to make contact with Burnes, then still at Kalabagh, by drifting downstream on one of the native crafts in common use but found the thing harder to manage than he had expected and capsized. Corpses, he observed, floated down at the rate of one a day. He engaged another crew; after two days of back-breaking work the boat had gained only five miles. He abandoned ‘his own element’ and rode up to Attock. At once he made arrangements to descend the Indus by boat. In the gorges below Attock the river, pent in between high cliffs and sown with jagged rocks, was in places as much as thirty fathoms deep; sluicing down at nine miles an hour the water foamed and raged, piled up at sharp angles of its course and then abruptly dropped, sometimes as much as eighteen inches. At the sound of broken water ahead the boatmen first knelt to pray, then leapt to their oars. The ‘passage was fearful enough in some places’.² Sometimes the river ran in a rocky channel and ‘detached cliffs stood up in the middle of the stream like basaltic pillars, having marks upon them which indicated the rise of the river of fifty and sixty feet above its bed’.³
The type of boat used on this stretch of the Indus, reported Wood, is the *duggah*, made of three pieces, two sides and a bottom that is slightly curved upwards at stern and bow, the clumsiest, and, at the same time, the strongest built boat upon the Indus. She is confined to that rocky and dangerous part of the coast between Kala Bagh and Attock. The duggah has neither mast nor sail. Her name is the word for cow, and the awkward sluggish motion of this boat shows that it has not been misapplied. If the duggah drops down the river there she must remain, and be sold for whatever sum she will bring; for to drag her up against the stream would cost more money in the hire of men than the boat is worth.

If the river is fearful in some places between Attock and Kalabagh, in others it runs wide and calm, reflecting yellow and russet cliffs in its placid waters. There is good grouse and partridge shooting nearby and the Indus provided attractive picnic-spots for British soldiers combining business with pleasure. Bindon Blood, for example, who had constructed a temporary bridge of boats five miles below Attock for some military exercises, produced a 'game course' of partridges, all shot nearby, when the Commander-in-Chief came to lunch on his bridge, and 'everyone was very merry. After lunch we passed a battery of horse artillery over the bridge as well as the bullocks and lighter carriages of a heavy field battery, the guns of the latter being rafted over at the same time, and the elephants swimming with much enjoyment.' He had solved the problem of anchoring the boats in a place where 'the river . . . runs five miles an hour or so over a bed of pebbles and small boulders for which our iron anchors were useless' by a method that Arrian and Lieutenant Wood would both have recognized; not being a deepwater sailor he found it 'a delightfully simple contrivance invented and regularly used by the local boatmen': nets made of dwarf-palm and filled with stones.

But Blood saw the Indus in a dangerous mood, too. A heavily-laden cargo boat had got caught in a whirlpool and then capsized: 'When we reached the scene of the accident we found the surface of the whirlpool so tightly packed with large floating sacks and the boat, all going round and round, that we had the greatest difficulty in forcing our boat to where we saw the men jammed in the wreckage.' Two men were drowned under the sacks before Blood could get near enough to help them.

Nevertheless, and in spite of its dangers, the river for hundreds of years provided a means of transport southwards from
20. British view of the Khyber pass, 1879: encampment by Jamrud Fort at the Indian entrance to the pass by Charles Cramer-Roberts
22. Tribesmen cheerful, but still armed, on the banks of the Indus

23. A hoopoe, from *Hindoo-stan Birds*
24. Dost Muhammed Khan

25. Ranjit Singh talking to one of his numerous relations: miniature of c.1840

26. *(Left to right)* H.B. Edwardes, George and Henry Lawrence: photograph by Emery Walker

27. Alexander Burnes in Bokhara dress, engraving by D. McClise
28. British troops crossing the Sutlej, 1846 by Henry Yule

29. Embarking camels on the Indus, 1851 by Henry Ainslie
Attock and it was still being used for one-way commercial traffic at the beginning of this century. *Duggahs* built near Attock carried cargoes as far as Sind; at the end of their voyage they were usually broken up or sold. With the extension of roads and railways river traffic declined.

Today it is still possible to travel down the Indus in these last narrows, though the arrangements and permits take time and patience. The boat will be about forty-five feet long, built of deodar, flatbottomed with a low bluff bow and a high pointed stern where the helmsman perches on a bench hugging his tiller to his chest. The two ends of the boat will be decked in, the centre part open, divided into passengers (aft) and crew and cook (forward). The motive power consists of two enormous oars, tree-trunks to which rectangular paddles have been attached by palm-leaf rope, worked through grommets on tholepins in the bows. At times the river splashes and gurgles as it runs over shallows; at times it pours smoothly and silently between its high walls. ‘In this part of the Indus,’ wrote Blood, ‘one hears a curious noise like very heavy hail on a corrugated iron roof. It is of course caused by the small stones rolling over each other at the bottom of the river.’ Mostly the boat drifts along quietly under its own smoke of curry with only one man paddling desultorily on each oar. A small stream trickles along a gully here and there, a few acacia trees and stunted shrubs cling to the bare rock, a dozen mounded graves lie close together on a narrow ledge. Suddenly the river turns sharply on itself and sets up ugly currents and back eddies, or the white water of shallows appears ahead, or great rocks stand up like battered lighthouses in the channel. Then as Lieutenant Wood saw long ago, everyone leaps to the oars, four or five men to each, and even the cook will forget his curry for a moment. Occasionally a string of camels plods over the sandy hills, for the camel-breeding nomads who wander between the Indus and the Afghan border bring their beasts to the river for the summer. As each camel in turn smells and sees the water below, it throws out its long neck joyously and dashes down the slope, legs flying in all directions, head wobbling eagerly. Sometimes groups of women beat their laundry on stones by the bank or a couple of shepherds submerge their sheep and goats, one by one, surprised and struggling; sometimes a party of naked boys plays in the shallows. One morning Blood heard a companion on his boat exclaim ‘By Jove! they’re women, every man-jack of them!’ and looked up to see a
bevy of women and girls 'more or less undressed' bathing in the river ahead.\textsuperscript{5}

But such excitements would be rare; the Indus is mostly left free for herons and egrets, kingfishers and divers and lapwings. Terns swoop like swallows, skimming the water; they build no nests but choose an island with enough water around it to be safe from jackals, and lay their eggs on the dry sand. Stilts poke along the banks on their ridiculously long thin scarlet legs.

The only town of any size on the river is Khushalgarh. Built of mud bricks, it is so exactly the same colour as the heights it precariously clings to as to be almost indistinguishable. A hundred feet below it the river is a lake of pale-green glass between white sandbanks and yellow cliffs.

The ancient routes between India and Persia crossed the Indus east–west and for strategic reasons the British adopted the same pattern, building roads out to the frontier; along the line of the river there is still only an unmetalled road and only for part of the way. Westwards lies Kohat, once for the British a favourite frontier station, clear-airied and, in their season, smelling sweetly of violets. The people of Kohat have never been at all like violets themselves. To this day the townsmen concentrate almost exclusively on the reproduction by hand and with amazing accuracy of an international variety of rifles, pistols and sten guns. The demand for firearms on the frontier, it seems, is inexhaustible. Even grenades are left about casually: 'A buffalo was blown to bits on Saturday when a hand grenade exploded near the animal. The grenade was lying in a corner not far from the buffalo. A tom cat started playing with it and nobody took any notice of the playful animal, although members of the family saw it fiddling with the bomb. Suddenly it exploded, blowing the animal to pieces.'\textsuperscript{6}

As Attock connects India to Peshawar so Kushalgarh, sixty miles lower down the Indus, is the crossing point for Kohat. Until the end of the nineteenth century the Indus was bridged at Kushalgarh by boats; first-class passengers crossed by tonga, third-class passengers walked over, goods were carried across by high ropes. The British made this an all-season bridge; one traveller at the end of the last century described how the mail carriage from Kohat galloped madly through the dark, changing the two ponies every five miles, to catch the nine o'clock train at Khushalgarh; the thirty-one-mile journey took two hours and forty minutes. Between the village on the western bank and the
railway station on the east, both built high on their cliffs, a great bridge of boats spanned the river, deep down and 'the huge steel hawzers that strengthen the bridge stretched from cliff to cliff, looking like spiders' webs hung across the abyss'. The whole affair, said one of the engineers responsible for it, was 'the most complicated structure he had ever dealt with'. In 1907 a permanent road and rail bridge similar to the one at Attock was opened. From boat level it looks enormously high and a train passing over it is as small as a toy.

Makhad, forty miles down the Indus from Khushalgarh, is a village of square, flat-topped, mud-coloured houses, a perpendicular sort of place in which all the streets are ramps or staircases. Five thousand people live there, making textiles, iron vessels and snuff, and the town wears an air of modest prosperity and many of the dark wooden doors are carved with flowers and geometrical designs. Just below Makhad the Soan River joins the Indus from the east. Its valley may be the home of the oldest of all the ancient human settlements on the Indus, for Stone Age tools have been found here in quantity. From its width it is clear that the Soan valley once held a much bigger river and geologists believe that, at one or another stage of the uprising of the Himalayas and Karakoram, the waters that were forced westwards made their channel here. Today the Soan is a small stream, except after local storms when it becomes a blood-red torrent discolouring the Indus for hundreds of yards.

Black and grey, furrowed with rain channels, the northern slopes of the Salt Range stand across the river's path ten miles downstream, so steep and pleated that it seems impossible for them to be breached. But, as Younghusband had seen at an earlier battleground between river and mountains, the Indus 'courses forward with a power that nothing can resist for long'. Deceptively quiet, neat as a snake slipping between boulders, the Indus winds out through its last barrier.
THE PLAINS
From the south the Salt Range is rough and abrupt as a broken wall. Huge freakish lumps of red and purple rock ribbed with greenish-grey shale stand against the sky and at their feet the plains begin. On either side of what Burnes called the 'crevice' through which the Indus emerges, where his own upriver journey had been stopped by the summer floods in 1837, stand two small towns: Kalabagh on the west bank and Mari Indus on the east. Here the river is still narrow; it is also deceptively calm, hardly seeming to move, but against the pillars of the bridge a little downstream the seethe and eddy of the water reveals its impatience.

For now at last the Lion River can stretch itself. Within a few hundred yards it is a mile wide, within a mile its bed is ten miles wide. From the bridge the great plain of the Punjab and the silvery river stretch south to a pale shining horizon asterisked with palm trees.

After 'the muddy Indus of the lower countries' Burnes was pleased to find that near Kalabagh 'the water of the river became much clearer, and ere we crossed to that town we could see the rounded pebbles at the bottom'. His party, consisting of a dozen boats, and all the 'novel paraphernalia' of a European camp, naturally roused great interest at Kalabagh. 'The people flocked about us; and the women – stout, sturdy dames, unveiled – begged us to buy their melons and vegetables.' People 'took to the water like amphibious beings, and swam about our boats on inflated skins, coming down to see us always skin in hand'.

Skins and rafts made of straw are still used today in many places along the lower Indus for the carriage of milk from the midstream islands. Pasturage for buffaloes on the islands is cheap, for they are thickly covered with reeds, but there are few ferries, so the herdsmen swim backwards and forwards, their chests supported on the rafts, their milk pitchers on their backs, their clothes bundled on their heads.
The cliffs of Kalabagh, thought Burnes, were 'romantic' but the political situation of its chief was 'one of uncertainty and peril'. The Sikh armies were then crossing the Indus here at intervals to exact tribute from the Pathan tribes on the west bank. The chief had been made subject to Ranjit Singh (though Burnes observed that he paid to Lahore less than a third of the taxes actually collected) but was surrounded by the enemies of the Maharajah. Burnes’s own mission found itself in some embarrassment since a Sikh army was even then preparing for action against the nearest tribe on the western bank, the Isa Khels. 'From neither party had we any danger to fear, but it might be difficult to steer a medium course that should not give offence to one or the other. The Eesha Khyl had acted throughout a most friendly part towards us, and some of them were now in our camp, while the drums and fifes, gongs and bugles, of the Sikhs echoed among the mountains within our hearing, and their troops were often in sight.' It looked as though Burnes's party might find itself between two fires and they removed themselves to 'escape all chance of molestation'.

Burnes was lucky to have met friendship from the Isa Khels. Not many years later Herbert Edwardes, administering their region, found them a thoroughly quarrelsome and contentious lot: 'there was scarcely a field ... which had not two claimants and one lawsuit. The whole country was full of litigants and cries for justice; and to this day, I feel assured that there is no more legitimate object of compassion than the magistrate who has charge of Esaukheyl.' It was not always their fault. In this stretch of the Indus (and indeed from here down to the sea) the floods and deviations of the river have for centuries created peculiar problems.

The Isa Khel country is a narrow flat strip of land on the west bank of the Indus below Kalabagh. For some years the main channel of the river had been tending westwards (as is generally true of most major rivers in the northern hemisphere) with the result that the territory of the Isa Khel tribes had been cut away, while a low and fertile alluvial tract had built up on the Sind Sagur Doab on the eastern bank of the river. Not long before Edwardes arrived there a sizeable portion of land had been shifted to the east bank. 'It was impossible,' wrote Edwardes, 'for the Afghans of Esaukheyl to see twelve miles of the breadth of their country quietly transferred to the people of the Punjab.' The new piece of land formed on the east bank, called Kuchee,
had been divided by arrangement between the east- and west-
bank tribes, its eastern part accruing to the Sind Sagur and its
western part, together with any future deposits, to be recognized
‘as so much emigrated Isakhel’. The Isa Khels, busy with tribal
conflicts, had abandoned their share of Kuchee to reeds and
tamarisks to such an extent that a Sikh army had had to use four
elephants in line abreast to trample down the jungle to make a
path to the Indus. Time passed, and the east-bank villagers who
had colonized Kuchee began to assume that the earlier agree-
ment was forgotten and that all the land was theirs. But the Isa
Kehls had long memories and as soon as Edwardes appeared
they reclaimed their own share of Kuchee and asked Ed-
wardes to adjudicate. Indignantly the men of Kuchee told him
‘there was not a child so ignorant as not to know that Esaukheyl
was on the right bank of the Indus’.

The balance of justice, how-
ever, seemed to Edwardes to be with the Isa Khels; he asked the
chiefs and local authorities on both sides to retrace the boundary
agreed earlier. The Kuchees obstinately refused to cooperate,
arguing that ‘the Indus was . . . an Alexandrian boundary . . .
an Alexander in its own peculiar way, dividing lands as it thought
proper, and giving them to whom it chose, by fiats, which could
neither be disputed nor resisted’. ‘The plea was too poetical for
our purpose, which was eminently practical,’ wrote Edwardes
drily, ‘and, if admitted, would have left the Esaukheylees the
prospect of soon having no country at all.’ He came down on the
side of the Isa Khels, but other problems almost at once distracted
everybody’s attention and nothing was settled.

On another occasion the unfortunate Isa Khels found that the
Indus had ‘cut off a considerable slice’ of their land and made an
island of it. The peasants living on the new island continued to
work the land and even made two new villages. ‘Occasionally the
Indus rose and overwhelmed the island, when both colonies took
boat and returned to the mother country, Esaukheyl, but emi-
grated again as soon as ever the island reappeared’.

Kalabagh, thought Elphinstone, travelling up to Peshawar in
1809, was an extraordinary and fascinating place, the houses
apparently built on top of each other among blood-red rocks
streaked with white salts, the clear Indus flowing narrowly
below: ‘It would have taken a week to satisfy us with the sight of
Calla-Baugh.’ Today it is no less extraordinary than when
Elphinstone saw it, no less romantic than in Burnes’s day.
Seeming almost to hang over the green and grey Indus Kalabagh’s
red mudbrick houses are plastered like swallows' nests against a series of terraces in the red cliffs. Some deposits of chromite, coal and gypsum are mined here and nearby, but the most important mineral is rock salt. In places the hills are almost solid salt, clear and hard and veined in red. Just downstream, where the Indus begins to widen, there is a sudden abundance of sweet water on the west bank and against the bald redness of the mountains and the barren yellow desert a fountain of green vegetation bursts out of the earth. Growing under and over and through each other vegetables, fruit trees, roses and oleanders make a rich and brilliant jungle.

This greenness is both brief and unusual. Canals and wells have now brought many areas of the plains into cultivation but there are still vast spaces of desert. From the air the soil looks rippled, as at the bottom of a shallow sea, an endless brown wilderness only rarely patched with green. From the road it is more varied: the yellow sandy wastes, discoloured here and there with white salts and spotted with thorny shrubs, are interrupted by fields of maize and sugar cane and occasional thick groves of oranges and dates and mangoes; low rolling rocky hills, red or brown, deeply eroded, sometimes break the flat horizon. But the prevailing element, always and everywhere, is sand.

Below Kalabagh and its small lush jungle the sands begin to encroach on both sides of the Indus. On the east the triangle of land, apex to the south, between the Indus and its last and greatest tributary, the Panjnad, has for centuries been called the Sind Sagur Doab: the 'Desert of the Indus', and for years most of it was useless except for the breeding of horses. Here, wrote Elphinstone, the sands were grey and the water brackish. But the Indus itself, even apart from its 'great name', and its interest 'as the boundary of India', was 'a noble object', backed by lofty hills. At the season he arrived it was disappointingly choked with islands, but from the local people he learnt 'that beyond the hills was something wild, strange and new'.

On the west bank of the river, nearer the mountains and beyond the Isa Khel country, the sandy desert is subject to violent winds and since the roads can easily be buried under blown sand the crossings are marked with posts. There are a few tamarisk trees, useless to man as timber or fuel and too flimsy even to provide shade. Shade against the relentless sun is what everybody longs for. The people of one village are said to have protested bitterly when a telegraph line was moved away since the poles
provided their only shelter. The tamarisk is a haven for birds, however, since its wood is so soft and decayed that any strong-billed bird can readily peck a hole in it for a nest. Sometimes owls, green parrots, woodpeckers, rollers, hoopoes and mynahs will all live together in the same tree.

Some thirty miles below Kalabagh the last right-bank tributary of any importance, the Kurram, joins the Indus. It rises in the great mountains of the Afghan border which, from the eastern side of the Indus, looked to Burnes ‘very imposing, the absence of ruggedness in their outlines giving the appearance of a vast fortress formed by nature, with the Indus as its ditch’. From these fortress walls, through the defiles that lead down from Afghanistan, hordes of savages and warriors have been loosed upon India over the centuries; even more than ever came over the more northerly passes through the Hindu Kush: always ‘wild, strange and new’.

The original inhabitants of the plains near the Indus, the Dravidians, were short and dark-skinned; they lived off the land by hunting and fishing. As their numbers increased they formed tribes, collected flocks and established settlements. They made knives and arrowheads of stone and built cromlechs of slabs of rock similar to the structures at Stonehenge. Discovering the use of metals they later fashioned iron weapons and simple ornaments of copper and gold. By about 3000 BC there were a number of villages and small towns in the hills to the west of the Indus. There were then more rivers in this region than there are today. The woods were full of gazelles, monkeys and chickens; the rivers were full of fish. The people had built houses of stone and mudbrick, used copper tools, hunted, cultivated the land and made pottery which varied in colour and ornamentation from district to district. At roughly the same time or possibly a little later, soon after the rise of the Nile and Euphrates civilizations, a great riverine civilization developed on the banks of the Indus and its tributaries. Its northern capital was Harappa, on the Ravi, not far from the modern capital of the Punjab, Lahore.

The hill villages and the river cities lasted for over a thousand years. About 1500 BC they fell to invaders from the west, probably in a series of encroachments rather than one great wave. Most of the survivors fled east and south. Pockets of dark-skinned tribesmen can still be found in India today and even on the banks of the Indus; below Kalabagh, for example, the men who push their reed-rafts between the islands and the mainland with their
pitchers of milk are noticeably darker and shorter and more primitive than the general run of Punjabis. Descendants of the victors and of their couplings with their Dravidian slaves, may possibly form the backbone of the gypsy tribes who have spread all over Europe. Gypsies now usually claim to have Egyptian ancestry. But in the eighteenth century a Hungarian working at Leyden University noticed that three Indian students spoke a language very like that of the Hungarian gypsies. 'It was long before the true significance of this fact was recognized, but it is now universally agreed that the gypsy language or Romani is an Indo-Aryan one, and that the fact can only be accounted for by postulating that the gypsies came from India.' The language is close; moreover the gypsies observe many customs common in India related to purity and tabus and in all their wanderings have kept together, and held apart from their neighbours, just as each Hindu caste insists on its separate and distinct identity.

The invaders who overwhelmed the ancient Indus peoples were the Aryans. In the steppes of Central Asia they had learnt how to tame the horses that there ran wild in herds a thousand strong, to ride them and harness them to light chariots. They lived mainly on the produce of cows, and cows were not only valuable but venerated. Semi-nomadic, driving flocks of cattle, goats and sheep before them, they wandered widely over the great plains. Gradually and with increasing momentum a horde of loosely connected tribes began migrating westwards. Some tribes continued west to overrun a large part of Europe. Others, attracted perhaps by tales of the fertility of the Indus valley, struck east across the passes of the Hindu Kush into India and after bitter struggles drove out the inhabitants of the Indus valley and themselves settled colonies near the great river. Like their predecessors they became farmers. They dug irrigation channels, sowed corn, beans and barley and prayed to the Indus: 'renowned bestower of wealth, hear us and fertilize our broad fields with water!' They knew how to spin and weave and work leather and metals. In the famous Aryan hymns, the Rig Veda, there is evidence of a gay life, of drinking, dicing, music and dancing. They were taller and fairer-skinned than the Dravidians; since they had conquered the country they were naturally 'nobles' themselves and the dark people who remained in the Punjab were 'slaves'. Their gods were the animistic gods of most primitive religions, spirits of sky, water and fire.

By about 800 BC the Aryans had organized themselves into
kingdoms stretching across the north of India, and into the strict classes which were to be the origin of the caste system of the Hindus: Brahmans, counsellors and priests; kshatriyas, the warriors; vaishyas, landowners and agricultural workers; shudras, survivors of the vanquished aborigines who served the other three orders as serfs; and the 'untouchables'. As the practical division of labour that the Aryans had found useful in establishing their colonies in India hardened into the Hindu caste system, so their spirits of nature, sometimes modified by the beliefs of the original Dravidians, became formalized into the Hindu pantheon of gods. Gradually the Aryans moved eastwards and since the Punjab is referred to in their later hymns only in disparaging terms, as a place where the proper religious rites were not observed, it seems likely that it had been invested by new invaders of different customs.

Some of the later arrivals, the Persians and the Greeks, the Mauryans, the Bactrian-Greeks and their many successors left coins, inscriptions, temples and palaces in the Punjabi plains as in the more northerly valleys. But almost continual warfare, culminating in the terrible Hun occupations in the fifth and sixth centuries, reduced most of the buildings to rubble. In the eighth century AD the Arabs reached the mouth of the Indus and began to push northwards up the river. Two hundred years later the Moslem incursions across the Indus in the Punjab were gathering impetus.

In its struggle through the mountains the Indus has never constituted an effective frontier or barrier. Countries and tribes bestride it, caravans ford it and even armies encumbered with weapons and gear have somehow managed to force their way across it. Its waters rush at a frightening speed, but here and there they run shallow; and its ravines are often sufficiently narrow to permit the construction of primitive bridges. The crossing is difficult and dangerous, certainly. But it can be done and has been done by determined men for thousands of years. Once in the plains, however, the Indus becomes an obstacle of a different order because of its sheer breadth. It may take hours to row across and the rare bridges of boats are so long that riders must be exposed to the sight (and sights) of their enemies for an uncomfortable period of time. Moreover the riverine tribes of the Punjab were traditionally good fighters and good boatmen.

Returning from one of his raids Mahmud of Ghazni was continually harassed as he marched up the Indus by fast light boats
manned by local archers and spearmen. In 1027, on what was to prove to be his last assault on India, he determined to crush these intractable tribes, the Jats. On the west bank of the river he built a large number of boats, fitting them with three iron spikes, one at the bows and two on the sides of their hulls. The tribes to the east, observing this activity, set to and built even more boats. Both sides must have taken a long time in their preparations and neither could have seen their enemies' shipwrights at work but spies, swimming across on rafts, no doubt kept them both up to date. When the Jats were ready they camped their families on the Indus islands for safety, armed themselves and swarmed over the river like hornets. One record credits the Jats with between four and eight thousand boats and Mahmud with over one thousand; even on the wide Indus these seem impossible numbers. Mahmud put out his fleet to meet the Jats. Each of his boats carried twenty archers and five men to throw fireballs and light the soldiers' arrows. When the two fleets engaged, many of the Jat boats were at once holed and sunk by the spikes on Mahmud's vessels, other were set on fire, others boarded. The Jats were utterly defeated. Those who escaped death 'met with the more severe misfortune of captivity'.

Successor and supplanter of Mahmud's dynasty of the Ghaznavids, Muhammed Ghuri met his own death on the banks of the Indus in the Punjab plains.

The tents in which the king slept were allowed to remain open to admit fresh air from the riverside. This enabled the assassins to see into the sleeping apartments, and, eluding the sentinel placed at the door, they found their way into the tent. Two slaves, who were fanning the king, on seeing the assassins, stood petrified with horror, and the assassins immediately plunged their daggers into the Sultan's body and killed him, inflicting on him no less than twenty-two wounds.

This was in 1205. The savagery apparently inseparable from the Indus continued. A few years later, when the Mongols were driving east into India a young prince of Ghazni inflicted a temporary defeat on them in Afghanistan. Jalaluddin celebrated his victory by 'putting the Mongols he had captured to death by torture or by driving nails into their brains through the ears'. The delay this caused turned out to have been unwise because it allowed time for the Mongols to re-form and Jalaluddin was forced to retreat down through the mountains to the Indus. Near Kalabagh the Mongols caught up with him. 'When his forces
had been surrounded, at the head of the seven hundred men of his bodyguard he flung himself once more against the Mongols, cut through their ranks, recaptured the colours that had been taken by the enemy, wheeled about, again forced his way through the Mongols, and then, seated on his charger, leapt from the top of a sixty-foot cliff into the Indus and swam over the river bearing the banner in his hand.¹⁴ Genghis Khan had intended to take Jalaluddin alive, if possible, but he was so impressed by his enemy’s courage that he forbade his men to shoot. Jalaluddin continued eastwards with the company who had followed him across the Indus. The Mongols pursued him, failed to catch him, but sacked Lahore and Multan, on the east side of the Indus. An English poet, imagining what pillage meant to a civilized city, wrote:

They will trample our gardens to mire, they will bury our city in fire; Our women await their desire, our children the clang of the chain. Our grave-eyed judges and lords they will bind up by the neck with cords, And harry with whips and swords till they perish of shame or pain, And the great lapis lazuli dome where the gods of our race had a home Will break like a wave from the foam, and shred into fiery rain.¹⁵

To the peoples of the plains the Mongols were not only savage and cruel conquerors but personally disgusting. They had

faces like fire, with caps of sheep skin, with their heads shorn. Their eyes were so narrow and piercing that they might have bored a hole in a brazen vessel. Their stink was more horrible than their colour. Their faces were set on their bodies as if they had no necks. Their cheeks resembled soft leather bottles, full of wrinkles and knots. Their noses extended from cheek to cheek, and their mouths from cheek bone to cheek bone. Their nostrils resembled rotten graves, and from them the hair descended as far as the lips. Their moustaches were of extravagant length. They had but scanty beards about their chins. Their chests of a colour half-black, half-white were so covered with lice that they looked like sesame growing on a bad soil. Their whole body indeed was covered with these insects, and their skin as rough and grainy as shagreen leather, fit only to be converted into shoes. They devoured dogs and pigs with their nasty teeth.¹⁶

For nearly 200 years the Mongols harassed the Indus valley but the summer heat of the plains was too much for them and their
raids always ended in withdrawal to the cool and windy uplands that they came from. In the end, undefeated except by the climate, they turned their attention elsewhere.

In the fourteenth century Ibn Battuta, a Moroccan theologian who travelled widely in the East, came over the Afghan mountains and down into the confusion that prevailed on the Indus in the wake of the Mongols. From his description it is impossible to identity his route; probably he crossed one of the passes above the Kurram. ‘Our party was travelling light,’ he reported, with ‘about four thousand horses’. This ‘light’ party was nevertheless attacked by brigands ‘but we shot arrows at them and they fled’.17

In 1504 Babur, some twenty years before his triumphant progress to Delhi, made his first raid down from Ghazni to the Indus. ‘I had never before seen the countries of warm temperature, nor the country of Hindustan. Immediately on reaching them I beheld a new world. The grass was different, the trees different, the wild animals of a different sort, the birds of a different plumage, the manners and customs of the wandering tribes of a different kind. I was struck with astonishment, and indeed there was room for wonder.’ His advance was not without difficulties. On one occasion his troops ‘cut off a hundred or two hundred heads of the refractory Afghans, which they brought down along with them’ and he erected ‘a minaret of heads’. On another ‘a general massacre ensued, and a number of heads were cut off and brought back to the camp . . . Of the heads a pile of skulls was formed.’ Near the Indus a body of ‘death-devoted Afghans presented themselves on an eminence’. Babur’s party charged them at the gallop, and successfully: heads were brought in, as usual, and prisoners, but this time Babur released the prisoners. When he reached the Indus he found that the west-bank villagers had already crossed over to the other bank; they ‘drew their swords, and began to flourish them in an insulting way’. Babur’s cup-bearer, alone and on an unarmed horse,

threw himself into the stream and pushed for them. After swimming his horse for the distance of a bowshot in the face of the enemy, who stood on the banks, it got footing and took ground, with the water reaching as high as the flap of the saddle. He stopped there as long as milk takes to boil, and having apparently made up his mind, seeing nobody following behind to support him, and having no hope of receiving any assistance, he rushed with great speed on the enemy who occupied the bank; they discharged two or three arrows at him, but durst not stand their ground, and fled.
Babur had already promoted this man from cook to taster: this 'courageous achievement' earned him even higher favours. Babur did not cross the Indus on this occasion but contented himself with marching down its right bank, keeping close to the river and looking for booty. There was little to steal but bullocks; these were so numerous, however, that 'the meanest retainer in the army often picked up three or four hundred bullocks and cows'.

The country thus looted was the Derajat, where three tribal chieftains, Ismail Khan, Fateh Khan and Ghazi Khan, had established three separate towns on the Indus below Kalabagh at sixty-mile intervals. All three of the Deras are at ferry and boat-bridge crossing points on the wide Indus and each has an old history as a centre of trade between India to the east and Afghanistan and Persia to the west. In the middle of the nineteenth century Dera Ismail Khan was a considerable city, surrounded by a mud wall, built beyond the needs of its own population with a view to the temporary accommodation of Afghan caravans and horse-traders. Because of the merchants the Deras were continually involved in skirmishes with brigands. 'I hardly ever saw a Powinduh [trader] who had not one or more wounds on his body,' said Edwardes, 'and the loss of an eye, broken noses, scored skulls, lame legs, and mutilated arms are almost as common as freckles in England.' Because of the strategic positions of the Deras thousands of soldiers have been ferried across the river here over the years, Indians, Sikhs and British. A Scottish officer described how his kilted soldiers, rowed across the Indus to the skirl of their bagpipes, had a terrible struggle at what they called 'Dismal Kahn' with their camels, who insisted on leaping into the water on the wrong side of the ferry and then had to be dragged, pushed and persuaded up the bank.

Like most of the Indus regions from Lake Mansarowar down to the sea the Derajat is a country for saints as well as traders and soldiers, and the religious dissensions that have so often divided it, passionately felt, have left ghosts behind. Early in this century two British officers met one. They had bedded down after dark in an empty house in Dera Ismail Khan. They slept on camp-beds with all the doors and skylights closed against insects. In the night they were woken by a stringed instrument. Twice they shouted to the player to be quiet. When they asked for silence a third time they were attacked by a 'Thing' and overwhelmed by a sense of evil. Neither of them could ever explain what had happened, but the next day they were told that the Mullah of the
One-stringed Harp had been buried in the garden and it was inadvisable to annoy him. The British sensibly picked flowers for the shrine and asked 'Let there be peace between us'. After this they had no more difficulty.

Saints, brigands and armies continually afflicted the Deras but still their worst danger came from the Indus. Even as it begins to stretch, the Lion River’s claws lazily curve out. Several times Dera Ismail Khan has been totally swept away and rebuilt, always a little further from the river. Today it is a busy boxy town situated more than a mile from the present channel of the Indus and growing fast; but on summer nights its people still hear the thunder of the river banks falling into the water as they are undercut by the current.

At the most southerly of the three Deras, Dera Ghazi Khan, there was a saint’s tomb. Some of Babur’s soldiers attacked the attendants, upon which ‘I ordered one of the culprits to be punished, and he was hewn to pieces as an example’. Conscious of duty performed, and now rich in cattle, Babur headed back to Afghanistan. The town, wrote Edwardes, ‘is one of the most lovely spots I have seen in the Punjab, and might well be called the City of Palms’. On both sides of the Indus cotton, indigo and sugarcane grew; comparatively speaking it was a fertile area.

‘Punjab’ means the Land of the Five Rivers, but the Indus is not one of them for it was regarded as the western edge of the country and not counted. It is the Indus tributaries, converging on it from the north and east, that define and characterize the Punjab; the country consists of the tongues of land between each of these rivers and the Indus itself.

The nearest tributary is the Jhelum, which rises at 14,000 feet not far from the Zoji La Pass. According to the Emperor Jahangir, Akbar’s son,

the spring rises in a basin, of an octagonal form about twenty yards in length by twenty in breadth . . . The water is so clear that, although its depth is said to be beyond estimation, yet if a poppy seed be thrown in, it will be visible till it reaches the bottom. There are very fine fish in it. As I was told that the fountain was unfathomably deep, I ordered a stone to be tied to the end of a rope and thrown into it, and thus it was found that its depth did not exceed the height of a man and a half.

Jahangir arranged for the spring to be paved with stone and planted gardens around it. ‘Such elegant chambers and edifices
The Lion Stretching

were raised on each side of the basin that there is scarcely anything to equal it throughout the inhabited world. The Jhelum flows westwards and south through the 'Happy Valley' of Kashmir. Here its sinuous channel, the Kashmiris told Knight, had inspired the convoluted patterns that they used in embroidering their famous shawls. Like the Indus it must break through the Himalayas and it does so in gorges sixty miles to the south of Nanga Parbat. From the foothills timber is floated down the river, and down the other tributaries, in large quantities.

When it reaches the plains the Jhelum is joined by the Chenab, whose name, which means 'the river of China', indicates that it was once believed to rise there. In fact it rises on the southern flank of the main Himalayan chain, about 150 miles south of Leh. In general its course parallels the Indus, northwest, then southwest. It is the largest of the five rivers and can be fierce, even in the lowlands. According to Arrian, Ptolemy reported that 'where Alexander's men crossed it on boats and floats it is a little under two miles wide and very swift; it is fouled by large jagged rocks over which the water pours violently with much noise and commotion. The floats got over easily enough, but of the boats a number came to grief, being swept on to the rocks, where they were broken up and their occupants drowned.'

About forty miles below the confluence of the Chenab and the Jhelum the two rivers are joined by the Ravi. The source of the Ravi, also in Kashmir, is to the south of the other two rivers and it reaches the plains more quickly and then meanders over them in a complexity of loops and bends. This is the river on which Lahore stands, some 200 miles east of Dera Ismail Khan. From Lahore to the junction of the Ravi with the Chenab—Jhelum is 175 miles as the crow flies but the distance by river is nearly 400 miles: a fact that has operated against the use of the river for transport.

The next two rivers come in together, the Beas and the Sutlej. The first European to see the source of the Beas was Moorcroft, who erected a cairn to commemorate the occasion. The Beas rises not far from the headwaters of the Chenab but takes a quite different course, west and then south. This is the river at which Alexander's army forced him to turn back to Greece. When it meets the Sutlej it is still not far from the mountains and its waters retain the blue clarity of an upland river, in sharp contrast to the Sutlej which, after its long journey across the north of India, is here turgid and muddy.
For the Sutlej is the Elephant River, the river that rises in Lake Rakas, only eighty miles from the source of the Indus itself. Unlike the Indus it runs south-west from its source and so breaks out of the mountains long before the Indus. Between them the two rivers enclose the great mountain system of the western Himalayas in a rough triangle, apex up, the Indus following the two upper sides, the Sutlej running along the bottom.

From far mountains and over dusty plains, taking very different courses, the Five Rivers of the Punjab finally meet in the Panjnad some sixty miles south of the city of Multan, which is due east of Dera Ghazi Khan. The two towns are linked by trails and roads and ferries and Multan has been an important market for centuries. The local workmen are adept in wood, leather, copper, ivory, glass and pottery. Elphinstone was told that they had once actually constructed a ram out of wood, and somehow caused it to move; only when its purchaser tried to eat it did he discover that he had been cheated. Multan hums with business like a beehive. Its cluttered bazaars and its blue and white mosques are attractive; its climate is not, or at least not for most of the year. According to a Persian rhyme,

With four things rare Multan abounds,
Dust, beggars, heat and burial grounds.25

Since none of these things is in fact at all 'rare' in the Indus country, Multan must always have had an exceptional abundance of them to merit the rhyme. Dust and beggars are everywhere, but Multan, a relatively prosperous town in the centre of the sandy plains, has more than its fair share even today. Its burial grounds are the legacy of the endless wars of plunder and religion. Its history is similar to the history of all the Indus plains towns—conquest by the Aryans, the Huns, the Mongols, the Arabs, the Afghans, the Moguls, the British—but Multan may have suffered more than other towns and villages because it was a richer prize. In religion Multan has been Hindu, then Moslem; its ancient idol, of human shape, with jewelled eyes and golden crown, was broken up by Moslem raiders, restored, and finally destroyed by Aurangzeb. An early-nineteenth-century British traveller quotes a local story to account for the terrible heat of Multan: a saint being flayed alive there called on the sun to avenge him, and the sun came down and then stayed nearer to Multan than anywhere else in the world.26

For a long time Hinduism, as various and as difficult to define
or challenge as a cloud of feathers, lived more or less uneasily with Islam, the central tenet of which is subjection to the One and Almighty God, who demands absolute obedience and will give rewards for martyrdom on his behalf. The one was mystical, sometimes voluptuous; the other as austere and hard as a scimitar. The theologians of both sides made some effort to understand each others' beliefs and persuade their adherents to tolerance. It was not until Tamerlane's raids across the Punjab reduced the province to chaos that tolerance, with order, utterly broke down. The result – though slow to show itself – was a new religion, a religion owing something to both Hindus and Moslems, a religion of mystics and warriors: the Sikhs. At their peak they were to dominate an area that extended south from the mountain ranges where the Five Rivers rise to the plains of Lahore and Multan, and east from Peshawar to the banks of the Sutlej; and almost the whole of the region where the Indus first fully stretches was, for a time, in their hands.
A WARRIOR RELIGION

Sikhism, writes a Sikh historian, 'was born out of a wedlock between Hinduism and Islam after they had known each other for a period of nearly nine hundred years. But once it had taken birth, it began to develop a personality of its own and in due course grew into a faith which had some semblance to Hinduism, some to Islam, and yet had features which bore no resemblance to either.' In the wake of Tamerlane, when Hinduism and Islam had deteriorated and turned against each other and the Punjab was in a turmoil, a man appeared who sought to reform them.

'The age is like a knife,' he said. 'Kings are butchers. Religion hath taken wings and flown. In the dark night of falsehood I cannot see where the moon of truth is rising . . . Modesty and religion have disappeared because falsehood reigns supreme. The Muslim Mulla and the Hindu Pandit have resigned their duties, the Devil reads the marriage vows . . . Praises of murder are sung and people smear themselves with blood instead of saffron.'

Guru Nanak was born in the middle of the fifteenth century near Lahore. He married and had two sons (also probably a daughter or daughters who 'died in infancy'). His chief interest, however, was in religion; he had always spent as much time as possible in discussions with holy men, both Hindus and Moslems, and in meditation. After eleven years of marriage, when he was thirty, he had a mystical experience; God spoke to him, charging him to teach the world how to pray and telling him to devote his life to worship, purity, charity and gentleness. He thereupon left his family and spent the rest of his life travelling and preaching in places as far apart as Ladakh and Ceylon; he made the long pilgrimage from the east bank of the Indus to Mecca. The disciples who gathered round him came to be known as Sikhs, and when he died one of them inherited his role as the Guru, or spiritual guide, without whose help, said Nanak, mankind could not achieve salvation. The third Guru was similarly chosen for
himself, and unrelated to the second. From then on, however, the mission of the Guru was left in one family, though not without dissension and even open conflict at some of the successions.

Towards the end of the sixteenth century the fifth Guru, Arjun, collected the poems and writings of his predecessors, and these, together with his own writings, became the Granth Sahib or Holy Book of the Sikhs. Interested as always in theology, Akbar was impressed by this work. For Akbar’s successor, Jahangir, however, the growing popularity of the Sikh religion represented a threat, especially when his own son sought out Arjun for assistance and blessing in his rebellion against Jahangir. Guru Arjun was put to death by torture.

By this time the Sikhs had already become conscious of their separateness: Arjun had written,

I do not keep the Hindu fast, nor the Muslim Ramadan.
I serve him alone who is my refuge.
I serve One Master, who is also Allah.
I have broken with the Hindu and the Muslim . . .
I will not pray to idols nor say the Muslim prayer.
I shall put my heart at the feet of the One Supreme Being,
For we are neither Hindus nor Mussalmans.²

With the execution of their Guru the Sikhs became increasingly militant, raising private armies and building fortresses. The Moguls could not be expected to view this development with favour. In 1675 the current Guru was executed by Aurangzeb. His body was stolen by his devotees and cremated but his head was taken back to his son.

Gobind Rai was nine years old when his father’s head was presented to him. The Sikh leaders took over his education, moving him from place to place in northern India for his safety. He hunted and wrote poetry. But he was not allowed to be young and carefree for very long. ‘As he grew into manhood, he was able to disentangle one thread which ran through the confusion of ideas; that although love and forgiveness are stronger than hate and revenge, once a person was convinced that the adversary meant to destroy him, it was his duty to resist the enemy with all the means at his disposal, for then it was a battle of the survival, not only of life, but of ideals.’³ He engaged Pathan mercenaries, he built more forts, he raised a family. After meditation he decided that a living Guru was no longer necessary and the abolition of the office would preclude the quarrels over the succession that had so often divided the Sikhs in the past. Spiritual and worldly
guidance could be given to the Sikhs by the Holy Book and by selected leaders. He chose the first five leaders by asking for volunteers for sacrifice. One after another they were taken away; each time Gobind Rai returned with his blood-stained sword to ask for the next volunteer. In fact he had killed goats, and the five 'victims', all formerly Hindus, were now, he announced, to be, with himself, the heart of the Sikh community, the 'Khalsa', the pure. Every male Sikh was surnamed Singh, meaning lion. Sikh women take the surname Kaur at baptism, which means both princess and lioness.

Before he submerged himself into the Khalsa Gobind Singh, intending to promote the formation of a close military brotherhood, 'an army of soldier-saints', imposed on the Sikhs special ways of dressing, in particular the obligation not to cut their hair or beards. A Sikh with a pastel-coloured turban wound round a mass of hair and a long beard caught up in a net is very conspicuous. This was later to prove to be to their disadvantage. Beards are of course not peculiar to the Sikhs; they have been regarded as distinguished and attractive signs of masculinity by many different people at different times. A lengthy correspondence in the Pakistan Times not long ago showed that a number of Moslems still take the matter very seriously. One man wrote: 'I cannot understand why so many of us go about clean shaven. As Muslims we ought really to wear beards, but if we can't do that we should at least have moustaches. There must be something that should distinguish men from women.' A second said: 'The beard is an international phenomenon. All manner of men sport beards, some from religious compulsion, some to follow the dictates of fashion and others probably for psychological reasons into which it may not be quite elegant to go. Not only men in the East have hair on their faces, quite a few Westerners have cultivated wild growths of hair. Take the hippies. They grow hair all over.' A third sadly reported:

As a college student I used to sport a neat little beard and fancied myself quite smart with hair on my chin. But I had to remove it, because whenever I did something unconventional I was ticked off by my friends in the words: you should be ashamed of yourself acting like that with that beard. While others would fool around with impunity I could do no wrong because I had a beard. Sir, the beard is an impediment in more ways than one. All lovers of beards ought to get together and try to rehabilitate the beard: it has fallen on evil days.

But a fourth felt 'that a law should be enacted forcing all men to
sport beards. After all God has given man hair for some purpose. It is sheer ingratitude to remove the hair from the face; the act amounts to the violation of an important law of nature.' One who foresaw the future warned the editor: 'Do you realize what you have done by creating a controversy over beards? Mr Zulfikar Bhutto, former Foreign Minister of Pakistan, is growing one in jail. He was formidable enough clean shaven, God only knows what trouble he will brew with hair all over his face.'

The last word should be left to what might be called the beard-opposition party: 'My barber friend has taken a strong exception to the subtle publicity in favour of beards. He fears that the campaign in your newspaper is some sort of conspiracy against barbers. He even attributes political motives to the correspondence on the subject. In the interest of harmony, peace and tranquillity it would be advisable to say nothing on the subject. Let each follow the dictates of his own conscience.'

In the eighteenth century the Punjab suffered repeated invasions from the Afghans on the far side of the Indus. For their own part the Sikhs were raiding and plundering into the country north and east. Whenever peace with outsiders looked to be possible the Sikhs immediately started to quarrel among themselves. 'Horsemen galloped madly in different directions claiming village after village by the simple act of leaving a personal token like a turban or a shoe to mark their ownership.' Without foreign enemies they turned against each other and became 'a snake with many heads'.

The Sikh leader who drew his co-religionists together and expanded their precariously held settlements into the Empire of the Punjab, which extended even across the Indus, was Ranjit Singh, one of the tribal leaders of what had by now become a loose and warring confederacy. By the end of the eighteenth century he had established his ascendancy over the other Sikh leaders and had even induced the ruler of Afghanistan to accept him as his viceroy in Lahore.

For forty years the history of the Punjab centres on Ranjit Singh. Two years after his arrival in Lahore he threw off the nominal yoke of the Afghans and had himself proclaimed Maharajah of the Punjab. From then on he regarded himself as the equal of any king or emperor in the world. Of all the personalities who have passed by the Indus over the centuries he is one of the most interesting. Physically he was at first sight unprepossessing. He was a smallish man. An early attack of smallpox had left his
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face deeply pitted and blinded one eye; it ‘was like a gaping wound’. But the other eye was bright and penetrating. Asked which of his eyes was blind, a man replied, ‘The splendour of his face is such that I have never been able to look close enough to discover.’ In his youth he had killed his mother and her lover in disgust at their wickedness but throughout his life he himself drank to excess, stupefied himself with opium, and enjoyed a regiment of wives and concubines. He also amassed a fortune, including the Koh-i-Nor, which he extracted from Shah Shuja when the Afghan King, in exile, was at his court. In spite of his drinking (alcohol had been proscribed by Gobind Singh) Ranjit Singh regarded himself as a devout Sikh. He found it expedient, however, to allow other religions their own freedom. Both Moslems and Hindus flourished under his rule and his kingdom was not a kingdom of the Sikhs alone but a kingdom of the Punjabis.

Personally brave (he was known as ‘The Lion of the Punjab’), a first-class horseman, and boundlessly ambitious, he worked and played with tremendous concentration. He was illiterate but interested in everything. A French visitor found ‘His conversation is like a nightmare... He is almost the first inquisitive Indian I have seen; and his curiosity balances the apathy of the whole of his nation. He has asked me a hundred thousand questions about India, the British, Europe, Bonaparte, this world in general and the next, hell, paradise, the soul, God, the devil and a myriad of others of the same kind.’ Burnes reacted in much the same way: ‘I never quitted the presence of a native of Asia with such impressions as I left this man. Without education, and without guide, he conducts all the affairs of his kingdom with surpassing energy and vigour, and yet he wields his power with a moderation quite unprecedented in an Eastern Prince.’

His first concern on gaining power was to develop a strong army. Freedom to practise their own religion ensured that Moslems would be prepared to serve him, and Punjabis of all religions were famous fighters. But more than a good native army he wanted a modern one. For some time princes in other parts of India had been recruiting European officers to train their troops and advise on armament and equipment, particularly in the areas where battles with French and British forces had shown the native commanders, to their surprise and chagrin, that huge mobs of brave infantry and cavalry were no match for small bodies of disciplined troops. Ranjit Singh’s neighbours to the
east had employed a variety of foreigners, mostly French, to train and even command their armies from about 1770 on, and the Sikhs had seen units of these armies in action and been duly impressed. They had not recruited foreigners themselves so far, partly because they were in internal confusion, partly because the British were still a long way from the Punjab. Soon after Ranjit Singh established himself as the undisputed leader of the Sikhs, however, the British, defeating large native armies (including many European-trained troops), reached Delhi, not much more than 300 miles east of Lahore, and in 1808 the East India Company sent an emissary to advise him that his empire should not be extended east of the Sutlej, the easternmost of the Indus Panjinad tributaries. Ranjit Singh accepted this, and throughout his life took care not to quarrel with the British; but they were, he saw quite soon, the greatest potential threat to his power and the possibility of conflict was always there. The sooner his army was made more effective the better.

A few English deserters from the East India Company’s troops joined the Sikh forces and some of the illegitimate sons of Englishmen by native women. But Ranjit Singh never fully trusted the English or the Eurasians because he was doubtful of their loyalty if he should come into conflict with the Company. Soldiers who had fought against the British in Europe with Napoleon were therefore much more welcome than Englishmen.

His mercenaries were a colourful band. Jean-Baptiste Ventura, an Italian by birth, arrived in Lahore in the spring of 1822 with Jean-François Allard, a cavalryman. Ventura was a colonel of Napoleon’s infantry; he drilled and disciplined Ranjit Singh’s army in the French system, married in Lahore within three years of entering the Maharajah’s service (receiving a handsome present), and eventually became a general. Allard raised regiments of dragoons, became a great favourite of the Maharajah and also a general. Paolo Avitabile, an Italian, joined the Sikh service in 1826; in Lahore he ‘lived in a house decorated after the fashion of Neapolitan art’. He was later appointed governor of Peshawar where he began by hanging fifty brigands every morning before breakfast to teach the tribesmen respect for the law. Court, a Frenchman, trained Ranjit Singh’s artillery and cast guns at the Lahore foundry. Honigberger, a Hungarian doctor, had the double job of preparing gunpowder for the artillery and distilling brandy for the Maharajah. Masson, a British traveller who met many of the mercenaries after they had dug
themselves well in, reported that they lived in tremendous style. General Allard had splendid establishments and could ‘enjoy all the luxuries of a refined taste’; he also became very rich. Ventura already had a harem and Avitabile had painted his mansion ‘in a singular and grotesque fashion’.\textsuperscript{15} Ranjit Singh indulged them all, because he needed them for his new army.

To the east he had already been blocked by the British. He now began to use his army to extend his frontiers westwards at the expense of the Afghans and northwards into Kashmir. A Sikh buffer state between the Company’s dominions and Afghanistan was altogether desirable to the British, but as the Maharajah’s army grew in numbers and efficiency they began to worry about his intentions; perhaps he would not be content with a buffer state position. With some difficulty the Company had already established a base near the mouth of the Indus, in the hope of trading upriver, and it had become important to survey both the river and the Sikh Empire.

So in 1831 Alexander Burnes was despatched up the Indus to Ranjit Singh with a present from the King of England of five huge dray horses, a stallion and four mares, and a coach lined with blue velvet. Horses and coach were all deliberately so large and so unsuited to the local climate and roads that they could only be delivered by river. By no means all of the British officers in India approved of this subterfuge. ‘The scheme of surveying the Indus, under the pretence of sending a present to Rajah Runjeet Singh, is a trick, unworthy of our Government . . . just such a trick as we are often falsely suspected and accused of by the native powers of India, and this confirmation of their suspicions, generally unjust, will do us more injury by furnishing the ground of merited reproach, than any advantage to be gained by the measure can compensate.’\textsuperscript{16} Ranjit Singh, cunning and long-sighted as always, accepted the King’s present gracefully. His representatives were sent to meet Burnes near Multan with offerings of money and sweetmeats; a salute of eleven guns was fired. Both parties expressed pleasure at the encounter. The Sikhs, wrote Burnes, ‘are tall and bony men, with a very martial carriage. The most peculiar part of their dress is a small flat turban, which becomes them well; they wear long hair.’ Ranjit Singh’s admiration of his present and of their escort was so fulsomely phrased that he must certainly have had his tongue in his cheek. Burnes was ‘that nightingale of the garden of eloquence, that bird of the winged words of sweet discourse’. The horses
themselves, 'little elephants', 'in beauty, stature, disposition, surpass the horses of every city and country in the world. On beholding their shoes, the new moon turned pale with envy, and nearly disappeared from the sky. Unable to bestow upon them in writing the praises that they merit, I am compelled to throw the reins on the neck of the steed of description, and relinquish the pursuit.' After two months of feasts and drinking parties, reviews and long conversations with Ranjit Singh, Burnes departed east to Simla, loaded with jewels and splendid robes, to report to the Governor-General. In Lahore nobody bothered with the four mares or the carriage; the huge stallion was tethered each day outside Ranjit Singh's quarters wearing a saddle of gold and ropes of precious stones.

Five years later Burnes reappeared in the Sikh Empire, this time openly examining the commercial potentialities of the Indus and known to be heading eventually to Kabul for discussions with Dost Muhammed, the Sikhs' antagonist. Although he did not invite Burnes to visit him the Maharajah kept in touch with his convoy. At the junction of the Indus and the Panjnad his officers presented gifts, including 'a ram with six horns, which I at first thought he meant should be typical of something or other, but it appeared that he merely brought it as a *lusus naturae* which he had no doubt would be highly prized'. Perhaps after all the six-horned ram did have a symbolic significance, for later, at Dera Ismail Khan, in 'an extremely kind letter' Ranjit Singh, by emphasizing the extent of his Empire, 'showed his fears that the British Government had some intention of clipping his wings'. These fears, thought Burnes, no doubt sincerely but, as it turned out mistakenly, were 'totally without foundation'.

British anxiety to establish order on the North-West Frontier led to the tripartite treaty of 1838 and Shah Shuja's renunciation of all Afghan claims to territory on the west bank of the Indus; during the course of the festivities which accompanied the signing of the treaty Ranjit Singh became suddenly paralyzed. He lingered for six months while the Army of the Indus marched to Kabul; in June 1839 he died and was cremated with four wives and seven slave-girls lying alive beside his dead body on the pyre. He left seven sons born of different mothers and his death was followed by a welter of assassination and struggles for power.

Once more anarchy prevailed in the Punjab. Preoccupied with the security of the frontier and shocked by the disaster of
the First Afghan War the British watched developments by the Indus with increasing concern. Troops and artillery were moved up to the Sutlej and a bridge of boats was brought to the river from Bombay. In response the Khalsa army initiated preparations for war. In December 1845 the Sikhs began to cross the Sutlej 'without a shadow of provocation', according to the British Governor-General, though the presence of a large British army on the Sikh borders might reasonably be considered a provocation. The Sikhs fought furiously but the war was short; in February, at Sabraon on the banks of the Sutlej, the Sikhs were utterly defeated and nearly 10,000 Punjabis were killed. The British Commander wrote: 'Policy precluded me publicly recording my sentiments on the splendid gallantry of our fallen foe, or to record the acts of heroism displayed, not only individually, but almost collectively, by the Sikh sardars and the army; and I declare were it not from a deep conviction that my country's good required the sacrifice, I could have wept to have witnessed the fearful slaughter of so devoted a body of men.' In the treaty imposed by the victorious British the Sikh boundary was pushed westwards from the Sutlej to the Beas, and a British unit was stationed in Lahore. A heavy indemnity was demanded from the Sikhs, which they could not pay; they agreed instead to surrender the mountain territories between the Beas and the Indus, including Kashmir and Hazara, an enormous area and much larger than the British were prepared to occupy. In a separate treaty between the British and Gulab Singh, therefore, the countries of Jammu and Kashmir were sold to Gulab Singh.

The first British Resident in Lahore was Colonel Henry Lawrence. The Punjabis had been lucky in Ranjit Singh, who had united them, enforced order and increased their power. They were to be lucky also in Henry Lawrence and his brother and successor, John.

The Lawrences are one of the first and most famous families to make the service of India into a tradition. Alexander, Henry's father, had worked in India and three of his five sons followed in his footsteps: George, Henry and John. George acquired a reputation as a brave soldier and an efficient political officer. He was one of the hostages taken by the Afghans in the first phase of the First Afghan War; when the British followed up their initial defeat by a second invasion, the Afghans sent George Lawrence to tell them that the prisoners would be released if the army retired. The British rejected the offer and George
therefore had to return to his captors; Henry offered to take his place, but George refused to accept his sacrifice and rode back to what seemed certain death. (In fact he survived.) Henry and John were men of even stronger personality and larger achievement than their brother. They were both intensely religious in a stern, Old Testament fashion (their mother was a descendant of John Knox) and filled with restless energy and a desire to do good, as they saw it. They did not see it in quite the same way, as it happened, for John, practical and hard-headed, realized that it was impossible to get taxes from the peasants as long as they were themselves being exploited by their rulers, while Henry, with romantic notions of nobility, hoped to enlist the good faith of the Sikh barons in improving everybody’s conditions. Conflict between the two brothers eventually led to Henry’s departure from the Punjab; but they were never at issue on the fundamental rightness of British activities in India. ‘John’s emphasis was on fear, Henry’s on love; John’s on what you must pay for what you want – Henry’s on the ideal whatever it costs; John’s on the rule of law, Henry’s on the rule of the individual. But it cannot too often be said that it was a difference of emphasis only, not of principle . . . There was kindness and ferocity in both.’

On his arrival at Lahore Henry Lawrence found a cauldron of confusion. Within six years of Ranjit Singh’s death his Empire had been diminished by more than half, the bloody struggles between his successors had left a young boy on his throne, and the country was in ferment. In Kashmir the people had rebelled against their new sovereign Gulab Singh, and Herbert Edwardes had had to be sent off with a British force and a Sikh army 17,000 strong to induce them to accept him. In other areas, too, Ranjit Singh’s Empire was now seething. Across the Indus the tribes, as usual, were sullenly refusing to pay their taxes. For years the Sikhs had been in the habit of sending an army across the Indus at intervals to collect what tribute they could: ‘great armies every two or three years, small collections, risings of the Bunnoochees, and frightful inflictions of vengeance by the Sikhs’. Almost as soon as Henry Lawrence arrived in Lahore the Sikh Chancellor told him that the Bannu and Kurram tribes needed a lesson: ‘there are two and a half years’ revenue due at this moment, so it is high time to send an army!’ Lawrence felt it was his duty to support the authority of the Sikh leaders and therefore agreed, only insisting that a British officer should accompany the army ‘to see that it resorted to arms only in extremity, and committed no
excesses'. He also advised the Sikhs to try to conciliate the tribes and reach a long-term agreement about the revenues to be paid. Herbert Edwardes, just returned from Kashmir, set off with a Sikh army in February 1847. They crossed the Indus some thirty miles below Kalabagh and marched to the Kurram valley.

Edwardes had seen seven years of military service in the East India Company, and had had some training in administration by Henry Lawrence, but his new assignment was unquestionably both tricky and dangerous by any standard. To add to his worries he was afflicted with a terrible toothache and his companions took turns in pulling out the tooth bit by bit. Nothing dismayed him. He was still under thirty and he found his arduous life both exciting and satisfying. Near the Kurram he met a friend and brother officer and wrote briskly: 'Happy is it to meet with a friend anywhere; but if two, far and long removed from the haunts and converse of civilized men, be brought together, in barbarous lands, by the common duties of some high enterprise, there is a kindling of heart towards each other, which would do good to the poor dandy who feebly lifts his hat to his lady-mother in the Park. It might burst his stays, but it would make a man of him.'

Edwardes's first impression of the Kurram valley was ecstatic. Like the Kabul valley it is well watered by snow-melt and rain, fertile with wheat and maize and oranges, shady with poplars and eucalyptus and chenars, and bright with irises and wild roses. 'In spring,' wrote Edwardes, 'it is a vegetable emerald; and in winter its many-coloured harvests look as if Ceres had stumbled against the Great Salt Range, and spilt half her cornucopia in this favoured vale . . . Altogether, nature has so smiled on Bunnoo, that the stranger thinks it is a paradise.'

As the centre of this rich district, Bannu is still a busy town, its streets crowded with men and cattle, and donkeys loaded with stacks of wheat or wood, its bazaars bustling with traders. The people who lived in this paradise, however, were 'spirits of evil', thought Edwardes, and 'bad specimens of Afghans. Could worse be said of any human race? They have all the vices of Puthans rankly luxuriant, the virtues stunted'. John Nicholson, who was in Bannu for a short time before Edwardes arrived there, was confronted with a small child who had been caught trying to poison someone. When Nicholson asked if he did not know it was wrong to kill people he said Yes, he knew it was wrong to
30. Irrigation before

31. Irrigation after
32. An Indus Delta fisherman, 1819 from Thomas Postans, *Sketches in Western India*

33. British paddlesteamer heading up the Indus c.1850 by J.B. Bellasis
A pilot from Cutch near the mouth of the Indus, c.1835 by Thomas Postans
36. Camels in Sind, with a European on one, 1852 by Henry Ainslie

37. Mohenjodaro today
kill with a knife or sword. 'I asked him why and he said "because the blood left marks".'

The people of Bannu were a mongrel race, incessantly quarrelling and fighting among themselves, fierce in countering attempts by Kabul or Lahore to control them. Only when an outside enemy attacked Bannu did the tribes sink their differences and join together to resist him: 'and this was the one solitary occasion on which there was any unity in Bunnoo,' wrote Edwardes. 'The Bunnoochees were literally never at peace unless they were at war!' The word for 'fort' and 'village' was the same in their language; there were about 400 of them. 'A more utterly ignorant and superstitious people than the Bunnoochees I never saw.' If all this sounds rather unnecessarily harsh on the 'Bunnoochees' who had after all been attacked and, so far as possible, exploited throughout most of their history, it must be read against the background of Edwardes's muscular and narrow-minded Christianity. He saw himself as 'the pioneer of Christian civilization in lands where Idolatry too often occupies the Temple, Corruption the Tribunal, and Tyranny the Throne', and it was difficult for him to grant any virtue to men of another religion or civilization, though he did later acknowledge courage and even honour in some of the Bannu chieftains.

The army and Edwardes were in Bannu for only six weeks; they collected little more than a quarter of the monies due and 'as to a peaceable settlement for the future (that is to say, an engagement, on the part of the people, to pay anything annually of their own free-will), we had fully ascertained that it was hopeless'. But Edwardes's mission had not by any means been fruitless. He had succeeded in preventing the Sikh soldiers from indulging in their normal practice of plundering the countryside; he had even insisted on the public flogging of an army elephant-driver who had cut down wheat for his beast. As a result the 'Bunnoochees' had refrained from their usual night attacks and sporadic murders and had even come into the Sikh camp to trade and talk. 'The blood-thirsty and revengeful tribes of Bunnoo, and the army of their Sikh masters, had, for the first time, met in something resembling friendship; and parted again without adding to the long account of mutual injuries and hatred. The small end of the wedge of civilized intercourse had at last been introduced.' One of the bravest chiefs, 'a grey-headed old rebel of seventy . . . came in rather proudly, with fifty or sixty horsemen at his back' to the great surprise of the Sikhs.
Moreover, the area had been properly reconnoitred. For years the ‘Bunnoochees’ had managed to deceive their nominal overlords about roads and passes, directing Sikh troops into quicksands, across unnecessary rivers and into defiles where ambush was easy. Now the country had been mapped, including ‘the real entrance and exit of Bunnoo, so long and so successfully concealed’.

After the first short incursion into the Kurram valley Edwardes proposed ‘that the old Sikh system should now be abandoned, and the permanent subjugation and occupation of the valley be undertaken’. All the 400 forts of Bannu should be levelled to the ground and one large Sikh fort should be built in their stead. Lawrence and the Governor-General agreed to this plan and put Edwardes in charge of its implementation. Almost incredibly, he succeeded, mainly because of the trust he had inspired on his first mission.

In November 1847 he addressed a proclamation to the people of Bannu which began: ‘I told you last spring, that if you did not accept the easy terms which I offered you, and pay up your arrears, I should come to collect the balance in the winter, build a fort, establish a Sikh garrison, and put your fertile valley under a [governor] like any other part of the Punjab kingdom’; and ended: ‘Above all keep in mind that the army which is now coming to Bunnoo, is not going away again after a month, but is coming to stay. Make your calculations therefore accordingly.’ A Sikh army with Edwardes crossed the Indus once more. ‘Had my proclamation been sent back to me as gunwadding, and the unanimous chiefs shut themselves up in their forts and defied me to pull them down, the valley of Bunnoo, for aught I know, might have been free at this moment. To be sure it would have been a hell; but what of that? The Bunnoochees liked it.’ However, the Bunnoochees, to Edwardes’s veiled contempt as well as open satisfaction, proved obedient. Within two months construction of the new great fort near Bannu by the Sikhs was well advanced and all but two of the 400 ‘Bunnoochees’ forts had been destroyed by their own tribesmen under Edwardes’s persuasion and promise of protection ‘without a single shot being fired’.

In the mountains above the ‘Bunnoochee’ and Isa Khel country lay the strongholds of the ‘Vizerees’ or Wazirs, who continually raided down towards the Indus and were greatly feared and hated in Bannu. These people were more to Edwardes’s taste, however, than the lowlanders for they were brave, proud and
honourable, but it was not easy to settle differences between them and the 'Bannoochees', whom they despised, and unconventional methods had to be adopted. One small property had been sold by Sher Must to Swahn Khan, and Sher Must was now to get it back again.

on refunding the purchase money. The question arose, what was the purchase money? Sher Must (who had to repay it) said three hundred and twenty rupees; but Swahn (who was to receive) said one thousand and twenty! Neither would abate a fraction, and the whole quarrel was as far as ever from a settlement, for the sake of this one point. 'Now', said I, 'look here! One thousand and twenty, added to three hundred and twenty, equal one thousand three hundred and forty, and the half of that is six hundred and seventy, or the medium between both your statements. I shall take two pieces of paper, and write on one six hundred and seventy, and on the other three hundred and twenty, and then put them into my foraging cap, and Sher Must shall pay whichever he draws out. Do you agree?' 'Agreed! Agreed! That is true justice. In destiny there is nothing wrong. God will do as he likes!' The foraging cap was mysteriously shaken, and presented to Sher Must, who trembled violently as he put in his hand; and though he drew forth the most unfavourable figure, he was quite relieved when the solemn ordeal was over.

Apart from razing the native forts and building a single large Sikh fort, determining innumerable disputes about land, water, grazing rights, camels and a catalogue of other issues, Edwardes in three months had started the construction of a new town (near the fort), a good road and a canal; he had laid out gardens; he had even found time to make inquiries about the purchase of silkworms which he thought should do well on the many mulberry trees.

But the political and administrative successes of Edwardes and other British officers not only failed to satisfy the Sikh authorities (even when they were to their advantage) but alarmed them, since foreigners who could achieve so much so quickly were clearly not to be easily dislodged. John Lawrence's land reforms, which benefited the peasant proprietors at the expense of the landowners, gave the aristocracy further reason for discontent. And more than 20,000 officers and men of the Sikh Army that had been defeated at Sabraon in 1846 and then disbanded were still at a loose end and, as Henry Lawrence put it, 'struggling for existence'. Lawrence went to England on sick leave and almost at once trouble broke out.
The governor of Multan, Mulraj, found himself unable to pay his taxes, in part at least, because the duties on river-carried goods, an important element in his economy, had been abolished by Lawrence. He resigned and in March 1848 a new governor was sent to Multan; two young British officers, Vans Agnew and Anderson, charged with overseeing the takeover, were received with courtesy in the fort but attacked as soon as they left its gates and badly wounded.

On the other side of the Indus, at Dera Fatah Khan, Herbert Edwardes, under Sikh authority, was presiding over a trial when he heard the sound of running footsteps and a sweating, half-naked messenger was ushered into his tent carrying a note from Vans Agnew reporting that he and Anderson were wounded, the whole Multan garrison had mutinied and he needed help. While he read this note, wrote Edwardes, 'I felt that all eyes were on me, for no one spoke, not a pen moved, and there was that kind of hush which comes over an assembly under some indefinite feeling of alarm. I never remember in my life being more moved, or feeling more painfully the necessity of betraying no emotion.' He coolly continued with the trial. 'But from that moment I heard no more. My eyes indeed were fixed mechanically upon the speakers, but my thoughts were at Mooltan, with my wounded countrymen, resolving how I ought to act to assist them.'

In about an hour he had made his decisions and broken up the court. He sent for the native officer in charge of the ferry between Dera Fatah Khan and Leia on the opposite bank of the Indus, ordered him to collect every available boat (it was now April, so the river was beginning to rise), told his own camp to prepare for crossing, and sent a heartening message ahead to Vans Agnew. It was too late, for Vans Agnew and Anderson had already been killed by a mob that had burst into the room where they were imprisoned. Much later Edwardes was to compose a high-flown inscription for their memorial:

... wounded and forsaken
They could offer no resistance,
But hand in hand calmly awaited
The onset of the assailants.

At the time, of course, he did not yet know they were dead. He was busy assembling boats and 'we were obliged to begin the passage of the Indus with three boats. It is a grand river at all seasons, but at this it was mighty and terrible. Each trip of the
boats was a little voyage, and occupied between two and three hours. 'At sunset a storm sprung up, and still farther embarrassed our slow passage.' But more boats arrived, the moon rose, 'so, packing all the boats full of soldiers, I put myself like an admiral in the van, and led the fleet across. . . . One of the boats was very old and rickety, and before it could make the left bank, filled with water and went down. . . . The stern of the boat found the bottom, and the prow remaining in the air enabled almost all to save themselves. Amongst them was a tall serjeant's wife who often boasted afterwards that she had shown more courage than the soldiers.'³⁵

From then on Edwardes indefatigably marched up and down the Indus and rowed backwards and forwards across it. The Sikhs had now risen *en masse*. The intentions of their civilian leaders in Lahore and elsewhere were obscure but the Khalsa was on fire. Vans Agnew had written, 'I don't think Moolraj has anything to do with' the attack on himself and Anderson;³⁶ but he certainly threw in his lot with his troops after the event. (Mulraj was later tried by a British court for murder, which found him guilty but recommended mercy as he was the 'victim of circumstances';³⁷ he was sentenced to imprisonment for life and died not long after.) Reports of widespread insurrection by the Sikh Army and of spies everywhere naturally made Edwardes distrustful of his Sikh soldiers. He collected a small army of Pathans from the Bannu outposts, sailed down the Indus to Dera Ismail Khan, and recruited more tribesmen. The 'Bunnoo-chee' subdued by Edwardes only a few months earlier also now sent men and guns to his assistance. Whenever possible he engaged the Sikhs in minor skirmishes; continually he bombarded the British authorities with urgent demands for troops.

But the hot season was beginning and the army leaders were reluctant to start a major campaign. Edwardes continued to try to secure the Indus ferries and by the end of May he had collected as many as seventy-two boats at Dera Ghazi Khan and could put 6,000 men across the Indus in one passage. In June he was at last allowed to take his force over to the east bank. An Indian Navy paddle steamer, the *Satellite*, was sent up-river as reinforcement. Other ships began to arrive, to ferry troops and stores and to deal with any Sikh vessels. In September the siege of Multan began in earnest and sailors of the Indian Navy found themselves ashore helping the artillery. At the end of December the magazine in the fort of Multan was hit by a British cannon
ball; more than 500 of the besieged were killed, including Mulraj’s unfortunate successor who, with his son, had been imprisoned by the mutineers in a dungeon below the fort. The last battles took place further north, in the flats between the Jhelum and the Chenab. At Chilianwala the Sikhs, according to an Englishman, ‘fought like devils . . . fierce and untamed even in their dying struggle. Such a mass of men I never set eye on and as plucky as lions; they ran right on the bayonets and struck at their assailants when they were transfixed.’ At Gujrat the Sikhs ‘caught hold of the bayonets of their assailants with their left hands and closing with their adversaries dealt furious sword blows with their right’. But they were spent. In March 1849 the Sikh Army formally and finally accepted defeat. It was a tragic moment for the Sikhs. ‘The reluctance of some of the old Khalsa veterans to surrender their arms was evident. Some could not restrain their tears; while on the faces of others, rage and hate were visibly depicted.’ One old soldier, giving up his gun, said: ‘Today Ranjit Singh has died.’

Ranjit Singh had united the Punjab; at his death the people had shown, as so often in their earlier history, that only a strong government could stand between them, so varied in race and faith, and bloody chaos. The British now proposed to fill this role. After the battle of Gujrat the Company took over the areas on both sides of the Indus formerly held by the Sikhs (and, incidentally, presented the much-travelled Koh-i-Nor to Queen Victoria). On the west its rule, like the Sikhs’, ran up to the foot of the great mountains; beyond the line of the administered districts lay the tribal areas. The five districts of Peshawar, Kohat, Bannu, Dera Ismail Khan and Dera Ghazi Khan (from north to south) together with Hazara in the north-east, each under a Deputy Commissioner, were administered by two Commissioners, respectively of Peshawar and the Derajat. It was not until 1901 that the frontier districts were combined to form a separate North-West Frontier Province.

Edwardes had arrived in Bannu in 1847; Pakistan became independent in 1947. In the hundred years between these two events the British succeeded in holding a fairly satisfactory balance between the different religious communities, between tribesmen and town dwellers, great landowners and poor peasants. Immediately after the Second Sikh War they began to direct the energies of the Punjabis to civilian ends. The Sikh forts were dismantled and their army disbanded but the con-
struction of roads and canals gave employment to many ex-
soldiers and the new river colonies gave them homes and land.
Sikhs who wished to continue as soldiers were eagerly welcomed
in the Company’s army, Moslems were recruited into the police,
Hindus (generally the best educated) were employed as office
workers. It all worked surprisingly well, and to the advantage
of the Punjabis. Or so they must have thought themselves, for
when the Mutiny broke out, only eight years after their country
had been annexed by the East India Company after two terribly
hard-fought wars, they not only remained loyal to the British
but, together with the Moslem frontier tribes, raised eighteen
new regiments for the British within four months. Punjabi troops
marched to Delhi. There were risings here and there in the
Punjab, but they were small in scale and quickly suppressed; on
the whole the Punjabi chieftains stayed loyal to the British and
the Sikh soldiers defended British families.

Favoured in the canal colonies and in recruitment to the army,
and increasingly prosperous after the Mutiny, the Sikhs re-
gained both economic and religious strength in the second half
of the nineteenth century. They had always been adventurous;
they now began to emigrate to the Far East, Canada and the
United States. They set up businesses in countries on the east
coast of Africa. But they were often unwelcome and ill-treated.
They then blamed the British for not putting things right. In
their homeland of the Punjab, encouraged by new opportunities,
many peasants had over-extended themselves and fallen into the
toils of moneylenders. Sikhism itself split into sects. The Sikhs
remained faithful to the British on the whole, however, and in the
First World War the Sikhs formed a large contingent of the
British Indian Army; of the twenty-two awards for gallantry
that the Indian Army won, the Sikhs gained fourteen.

In 1919 the Punjab suffered from a severe influenza epidemic
(possibly brought back by soldiers from France). The air was
full of rumours of the hostility that Sikh emigrants had encoun-
tered abroad. In this tense atmosphere rioting spread and the
British banned all meetings. Defiantly, a crowd assembled in
Amritsar, the holy city of the Sikhs east of the Indus, and a small
unit of British Army troops, perhaps unnecessarily nervous, per-
haps remembering that rapid and decisive action had often nipped
risings in the bud during the Mutiny, fired on them and killed
many people. The sympathy between the Sikhs and the British
was shattered. This did not make the Sikhs pro-Hindu or
pro-Moslem; but it prevented them from taking an active part in the various schemes offered by the British for their participation in the government of the Punjab. In the Second World War the Sikh regiments once more fought with the British but many of their captured soldiers joined the Japanese forces.

Afterwards, when the British prepared to leave India and Partition was being considered, the Sikhs argued vehemently against Pakistan; if it had to be, they said, they must be allowed their own state, an area, they suggested, stretching roughly from the Indus to the Chenab. It was unthinkable that they should be placed under the Moslems. The trouble, however, was that the Punjabi Hindus, Moslems and Sikhs were hopelessly entangled; the Sikhs were 'not geographically situated so that any area as yet desired . . . can be carved out in which they would find themselves in a majority'.

A British-Hindu-Moslem commission was set up under the chairmanship of Sir Cyril Radcliffe to make the least agonizing division possible in the Punjab. 'The Radcliffe award,' wrote a Sikh historian, 'was as fair as it could be to the Muslims and Hindus. The one community to which no boundary award could have done justice without doing injustice to others were the Sikhs. Their richest lands, over one hundred and fifty historical shrines, and half of their population were left on the Pakistan side of the dividing line.' Amritsar was on the Indian side of the border as were the countries of the upper Sutlej, Beas and Ravi. From Lahore to the Indus the Punjab became part of Pakistan. The province was split almost in half; sixty-two per cent of the land and fifty-five per cent of the population went to Pakistan. The Sikhs of the West Punjab prepared to move; as did the Hindus.

The toll of human suffering at Partition, when millions of Hindus and Sikhs headed east to India while millions of Moslems struggled west to Pakistan, when, inflamed by mutual resentment, religious passion and fear all three communities set about murdering each other, can never be assessed. In the spring of 1947 men were already collecting arms and organizing themselves for battle. By August, when the British left, 'nearly ten million Punjabis were at each other's throats'. Conspicuous in their beards and turbans the Sikhs suffered more than anyone. Estimates of the number of people killed in the Punjab naturally vary; the likeliest figure seems to be something under 200,000. Thousands more were abducted, enslaved, raped. But appalling
as was the horror that the Punjabis inflicted on themselves at Partition, it was far less frightful than the horrors that foreign invaders – the Huns, the Afghans, the Mongols – had subjected them to over the centuries.

There are few Sikhs near the Indus now, and since they were not only warriors but also good farmers and businessmen the country was poorer for their departure, at least at first. Now it is up to the Moslems, who at last have it effectively to themselves, to show what they can do by way of growth and development. Given the predominantly agricultural economy and the climate of Pakistan, development will depend above all on success in making the maximum possible use of the Indus. In Pakistan everything, in the last resort, depends on the Lion River.
From high Tibet the Indus is driven to a circuitous route by its enfolding mountains, allowed only a brief and occasional space to spread, as at Skardu and Hund. But once it reaches the plains it is no longer driven, it commands. Between Kalabagh and the sea the river gives life as water, to human beings, animals and crops. It also gives death in its catastrophic floods.

Below Kalabagh and past Isa Khel and the three Deras flows the marvellous endless flood; in winter through a maze of narrow channels choked with islands and shoals, in summer spreading so widely that from one bank there seems no other side to it. Vigne found the scenery ‘of no character at all but the river itself was magnificent, although so unadorned’. He had sailed down the Sutlej and then the Panjnad to the Indus. ‘One glance at the Indus and, without seeing them, we must believe in the immensity of the . . . Himalaya; one glance at the Himalaya, and we cease to be surprised at the volume of the Indus . . . it is impossible not to venerate the river, to form which ten thousand streams have leaped their waters downwards from some of the most elevated and most interesting regions on the face of the earth.’

The country may be ‘of no character’, in the sense that it is flat and generally featureless, but the colours, sometimes subtly shaded, sometimes sharply contrasted, give it variety and rhythm. The sandy plains are not all sand-coloured: they are also lemony and brown and reddish, and in places as white as snow. The yellow walls of the small square houses are freckled with round dark cakes of dung drying for use as fuel. Sky-blue canals reflect the tall shady willows on their banks, and between stretches of naked earth oranges suddenly glow like lamps in their glossy green foliage. On an early summer morning the mists near the Indus are dimly and magically starred with date palms; here and there its placid waters ripple as a milkman swims slowly in from the islands, his black head protruding
above his tiny raft. Along the river banks people walk to work and to market. Both men and women wear loose and enveloping clothes, thigh-length shirts and baggy trousers tied at the waist with a cord, usually more or less white but on feast days sometimes coloured. In the villages the women cover themselves with the burqa, either the head-to-toe tent or a two-piece affair consisting of a veil over the face and a cape from the

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**Principal barrages on the Indus and its tributaries (1972)**

See also map on p. 168
shoulders to the feet, but in the country, where they need freedom of movement to work in the fields, they wear loose blouses over baggy trousers or long skirts, in bright patterns of red and yellow, and their heads are bare. In winter both sexes supplement their costume with a variety of sweaters and jackets, shawls and stoles, woolly caps and headscarves. Many people go barefoot, especially in the country. The clothes can look very beautiful when the colours have been faded by the sun to soft pinks and blues and lilacs; they fall into sculptured folds; they lend themselves to lovely drappings. But too often they are dirty and the headscarf is distressingly used as a handkerchief, a floor-polisher or for any other purpose that presents itself.

There are animals everywhere. Camels linked nose-to-tail and panniered with bales of fluffy cotton sway along a dusty road, their bells tinkling high and clear. Two brindled humped-backed cows plod in front of a creaking cart heavily laden with fodder or vegetables. A company of walking haystacks nods and flutters over the tiny hooves of donkeys. One of the ugliest animals in the world, the water-buffalo, apparently constructed out of black tarpaulin loosely stretched over several clothes-horses, all knobs and ridges and hollows, drags ploughs and wagons. It has huge crescent-shaped horns and looks fierce but its nature must be calm and kind for it lets little boys clamber up over its head and sit on its back beating their heels against its sides. Kites and green parrots scream overhead. At midday the date trees droop over their own shadows under the brazen sun and every animal and human sleeps. The temperature falls a little in the evening and as energy returns people come out to breathe and to collect water from the wells; the loosened camels and donkeys put their noses into bundles of green stuff and the buffaloes wallow luxuriously in the shallow ponds. Somewhere in the middle distance a flock of goats will be ravaging. The Punjabi goat is a splendid beast, almost as large as a calf, short-horned like Pan, with a proud lift of the head. Its hair is short and sleek, its legs are strong and slender as a ballet-dancer’s. Delicately picking its way with its small neat hooves up and down the hills and across the plains it has gradually ruined thousands of acres of trees by biting off every leaf it can reach, and on its hind legs it can reach up to six feet.

In every direction stretch the great sandy plains. At Kalabagh the Indus is just under 700 feet above sea-level; the distance to the sea is some 950 miles. The average gradient for all this
distance is therefore less than nine inches per mile. As the river slows down it drops the silt it has carried at speed through the mountain gorges and gradually its bed rises above the level of the surrounding land. For thousands of years unusually heavy floods have occurred at intervals. A natural upstream dam caused by earthquakes or glaciers has been breached, or a heavy and slightly earlier monsoon has coincided with the end of the summer snow-melt period. At such times the Indus and the rivers of the Panjnad overflow their banks, sometimes with such force as to drive new channels through the flat country. Over and over again the five Panjnad rivers and the Indus have tacked backwards and forwards across the plains. In fact the plains of the Punjab and Sind were made by these continual manoeuvres of the rivers. The soil they have deposited over the years is worn very fine: 'Neither in the bed of the stream nor in any portion of the plains is it possible to find a grain of sand so large as a pin's head.'

The ancient peoples of the Indus, observing its seasonal floods, made efforts to control them and to direct the waters into agricultural areas by building walls at strategic places. These were usually swept away quite soon and had to be rebuilt. Irrigation dependent entirely on inundation has obvious disadvantages, since it is severely limited both in time and area. For thousands of years, however, inundation canals were the only known method of making use of the great rivers. The Arabs are said to have laid some canals in Sind but they seem to have been shortlived. Jahangir built a perennial canal in the seventeenth century, from the Ravi to a pleasure garden that he laid out on the other side of the river from Lahore. His son, the next Mogul, built a second Ravi canal to irrigate the Shalamar Gardens of Lahore; the Sikhs carried an extension of this canal to Amritsar to fill the tank at their sacred Golden Temple. These were the only all-season canals that the British found when they took over Sind and the Punjab.

In the British Isles, with its steady rainfall, they had had no need to concern themselves much with the problems of irrigation, though they were already developing a canal system for transport purposes. The problems presented by the combination of the great plains and the powerful and unpredictable rivers were all new to them. They surveyed the systems in use, the inundation canals and the few Mogul works. Engineers were sent to Mediterranean countries to examine the irrigation systems that
had been adopted there. Even before the Second Sikh War the British were making plans for the construction of two canals, one from the Ravi, the other from the Chenab. In 1859, only a year after the suppression of the Mutiny, the first permanent canal was opened. It was only partly successful. But filled with nineteenth-century energy and confidence, the British proceeded to build more canals, learning, as they went, from their mistakes.

For a long time the engineers planned and constructed canals or the improvement of their own particular regions, without much consideration for the interests of neighbouring areas. For a long time, too, the emphasis was on flood control rather than irrigation for agricultural purposes. But events far beyond the Indus, as had happened so often before in its history, began to reverberate along its banks. The strain of the canals taken from the eastern Indus tributaries, particularly the Ravi, began to tell; it became clear that there was a limit to the water available from them. A series of famines in India pointed to the need for greater food production, and the British authorities determined that the Punjab should be developed as the granary of India. For this, large-scale irrigation was necessary.

By 1900 administrators and engineers alike had begun for the first time to consider the lower Indus basin as a whole. A new concept, entirely original at that time, was adopted and put into practice: that of using one river to feed another by means of link canals. The Jhelum was connected by canal to the Chenab, the Chenab to the Ravi. The engineers gained experience, and higher-grade materials and more efficient construction machinery became available. A number of weirs and barrages were built across the canals and the Panjnad tributaries. They are both transverse walls; but whereas weirs are built low and designed to hold water back in the dry season for diversion as necessary, and floodwater runs over them and is lost, barrages are equipped with vertically adjustable gates, so that they can pond water in the flood season, thus regulating floods and providing a reservoir for the dry winter months. In 1932 the first barrage on the Indus itself was opened at Sukkur and the greatest irrigation system in the world came into operation. Just before Partition a second Indus barrage was built at Kalabagh. 'Successfully or not,' wrote a British engineer concerned with these great projects, 'the British did their best and found satisfaction and reward in so doing.' An American scholar finds that their efforts were indeed successful: 'By the time the Union Jack came down in Lahore,
British engineers had not only given the Indus basin the most extensive irrigation system in the world: they had developed most of the formulas now used everywhere in canal construction and operation.4

Other barrages have been built since Partition but the one at Sukkur is still the most impressive. The place itself is unique in the plains, for instead of twisting and wandering over the sands the Indus here runs through a gorge in limestone cliffs, and it is only half a mile in breadth. There is evidence that in ancient times the Indus took different courses round these hills, at one period to the east, at another to the west, and floodwater still overflows in both directions. The ancient capital of Sind, Aror, lay to the east of the present channel and there is a story that a merchant who had sailed up the Indus to it in the tenth century was responsible for changing the course of the river. The local prince had imposed harsh trading terms on him and was also demanding one of his beautiful slave-girls. The merchant asked for three days to consider the matter and during this time found enough men to dig a new channel westwards away from Aror, using the excavated earth to dam and redirect the river. On the morning of the fourth day the people of Aror found they had no river, 'nothing but mud and muddy water'.5 The feat is just possible but a more likely explanation of the change in course is an earthquake.

Sukkur town, headquarters of the district, lies along the present west bank of the Indus above the barrage, its light brown buildings interrupted by tall white minarets as thin as pencils. Punts and larger cargo boats cluster against its quays. The Indus has been made into a lake here by the great steel curtain thrown across it just downstream. Opposite Sukkur is the smaller town of Rohri; between the two lies the fortified island of Bakhar, regarded by successive rulers and invaders as an important strategical strongpoint. Another larger island, green as an emerald in spring, is today the vegetable garden of Karachi. Seven great canals take off from the impounded Indus at Sukkur, three on the west bank and four on the east. Below the barrage the river, except in the flood season, is low, running between banks of dried mud, a curious contrast to the lake above and the brimming canals on each side.

If they were not rich enough, even with their new canals, to warrant the title of granary of India, the provinces of the Punjab and Sind were able to produce immeasurably more food for the
vast population of India than had ever been possible before. The ancient agricultural settlements along the Indus had grown wheat and barley and field peas; in the ruins of their cities melon seeds have been found and sesame and a few date stones. They seem to have used cotton and perhaps rice. A thousand years after they were swept aside by the Aryans, Nearchus, sailing down the Indus with Alexander, found sugarcane growing widely in the fields. But before the construction of perennial canals, before adequate water could be relied upon at all seasons, agriculture was a precarious business. With water, large areas of the plains can produce two crops a year.

In spring the farmers plant cotton, rice, maize, millets and sugarcane for the autumn or Kharif harvest. In autumn the crops that need less moisture and can stand low temperatures are put into the ground for the Rabi or spring harvest; wheat, barley, grain and oil seeds. Settlements along the new canals were encouraged by grants of land; beside the new bright fields of cotton and wheat, great orchards of citrus, mangoes, peaches and plums grew up, so rich and thick that armies of small boys with rockets and catapults had to be employed to frighten away the green parrots and other birds that pecked the fruit and ruined it.

Of all fruits, dates are perhaps the most valued by Moslems. They are 'lush green symbols of radiant spiritual incandescence of Islam,' wrote one official, 'vegetative flags of Islam symbolising the all-embracing spirit of universal brotherhood of the Moslems'. The same writer continues on a more practical plane: 'the date palm is an extremely useful tree' and explains how the fruit, stem, stone, branches, and leaves all have their uses. An old proverb says: 'The date palm requires its head in fire and its foot in water.' With better irrigation the palm groves spread. The different varieties have fanciful names: 'Wife of the Warrior', 'The Bride's Tree', 'So Sweet it Melts in Your Mouth', 'Big as a Cow'.

In the development of irrigation the need for flood control was not overlooked. Protective walls were constructed at vulnerable points and the new barrages holding back the river water fulfilled a double purpose in controlling floods as well as creating reservoirs from which canals could be drawn. From the 1920s onwards the British established observation points at the various places where the great rivers emerge from the mountains, and began to build up detailed hydrological records. Only with such records, stretching back over many years, can the
future vagaries of the rivers be predicted with any confidence.

For nearly fifty years the problem of water in the desert, of controlling and harnessing the great rivers in the plains, had been dealt with as an integrated whole. All this was to change in 1947 at Partition. Sir Cyril Radcliffe, chairman of the Commission charged with dividing the Punjab between India and Pakistan, fully appreciated the importance to both countries of the system of canals and river control that was then functioning across the province. He suggested that the two governments should agree, before their mutual frontier was determined, to continue to operate the whole complex together and as one. This was obviously sensible but, in the climate of the time, altogether unacceptable, and he was severely snubbed for his pains by both sides. Jinnah of Pakistan preferred his own deserts to fields watered by courtesy of the Hindus. Nehru of India said flatly that India's rivers were India's concern. The Radcliffe Commission, apart from Sir Cyril, who had no previous experience of India and was therefore presumed to be impartial, consisted of four Indian High Court justices, two Moslems, one Hindu and one Sikh; these four were naturally preoccupied with the interests of their own communities and Radcliffe found that he had to arbitrate more or less singlehanded. He could trust no one; even the maps produced by representatives of the different interests and by the British were irreconcilable. Five weeks was the time allowed for a job that needed years. In desperation and despair Radcliffe did it in less.

When the dust died down Pakistan had apparently come off well, as far as water was concerned, with twenty-one of the twenty-three perennial canals of the Punjab included in its territory. But India, as Nehru had hoped, now had potential control of every one of the 'Indian' rivers that fed the canals. All the five rivers of the Panjnad run through Indian territory before reaching west into Pakistan, and even the Indus itself, as a result of the Indian occupation of part of Kashmir, is 'Indian' in Ladakh. In the far gorges of the Himalayas it would probably be impossible for India to make any effective diversion of the Indus; but other rivers, notably the Sutlej, wind for miles through the Indian plains. Moreover, India was left in possession of the all-important headworks of the water systems on both the Ravi and the Sutlej, which for fifty years had served fields now in West Pakistan. She could cut off supplies to Pakistan at any time she wished.
Jinnah had disdainfully refused water by courtesy of the Hindus. He received from them neither courtesy nor, for a short and disastrous period, water. A Standstill Agreement, designed to cover the period between the date of Partition, August 1947, and the end of the fiscal year, March 1948, which included machinery for the settlement of disputes, had been signed by both India and Pakistan. The very day after it expired, without warning, India closed off the Ravi and the Sutlej. It was the beginning of the summer sowing, and over a million acres of cultivation were ruined in Pakistan. The Indians maintained later that it had all been a mistake and a misunderstanding. But it might well have been a calculated effort to wreck Pakistan’s very existence and force her back to unity with India — as many Pakistanis believe. If it was, it failed. Pakistan has never forgotten, and from that time on has shown an adamant determination to have her own river and irrigation system, under her own control.

Arguments between India and Pakistan dragged on and on; there were endless disputes about the respective allotments, the cost and the timing of receipt of the river waters. The ad hoc agreements that were concluded proved very unsatisfactory to Pakistan. When water was in short supply all over the western part of the subcontinent the rivers running from India to Pakistan were held back for Indian use. When seasonal floods rushed down the Panjnad rivers, of little practical use to Pakistan, they were deducted from her annual quota. Perforce, for its own survival, Pakistan began to work on the Indus.

In 1955 the Ghulam Mohammad Barrage at Hyderabad on the lower Indus was completed; it has proved to be a failure since the holding back of the fresh water of the Indus has allowed the sea to penetrate further up into Sind from the coast than before. Near Dera Ghazi Khan a barrage that had twice been planned by the British was put in hand in 1953 and completed five years later. Another, halfway between the Indus–Panjnad confluence and the Sukkur barrage, also originally suggested by the British, was finished in 1962. Other great works were planned for the Pakistan stretches of the Panjnad rivers. The new barrages helped to alleviate the problem for Pakistan, but not to solve it. She was still overdependent on Indian goodwill for the use of the Panjnad waters.

As early as 1951 the World Bank, hoping that the two countries would eventually cooperate in running an integrated system
for the Indus basin, had tried to help them achieve an agreement. It soon became clear, however, that neither country really wanted any such thing; both wanted complete independence, and control of 'their' rivers. The negotiations were long and wearisome. India and Pakistan, implacably hostile to each other's interests, argued interminably and the representatives of the Bank and of governments trying to help resolve the impasse must often have felt 'a plague on both your houses'. India still held the aces, in terms of territorial command of the rivers' headwaters. But Pakistan, initially fired with idealism and now toughened by the struggle to survive its first desperate years, was already beginning to control the Indus and, at peace with the world, was looking towards a period of growth and expansion. India, on the other hand, was faced internally with growing economic and political problems while externally Chinese troops were attacking her outposts in the Himalayas. By 1960 the balance of advantage was more even that it had been at Partition, and the World Bank at last succeeded in obtaining India's and Pakistan's signatures to an Indus Basin Treaty.

The two countries pledged themselves to recognize their community of interests on the rivers; a permanent Indus Commission was set up, consisting of Commissioners from India and Pakistan, and a network of hydrological and meteorological stations whose information was to be available to both countries. The three eastern rivers of the Panjnad - the Ravi, Beas and Sutlej - were allotted in full to India, after a ten-year transition period during which they would provide an agreed amount of water to Pakistan. The Indus and the two western rivers of the Panjnad, the Jhelum and the Chenab, were recognized as Pakistan's, and India promised never to interfere with their flow into Pakistan. During the transition period Pakistan was to build works on the western rivers to replace the waters she was losing from the eastern rivers. The division and reorganization of the complicated arrangements that the British had contrived over the years, when almost all of the Indus basin was under one authority, needed an astronomical amount of money. Both India and Pakistan subscribe, Pakistan on a much lesser scale; the World Bank provides loans; a group of 'friendly governments' (the U.S.A., the U.K., Canada, the Federal Republic of Germany, Australia and New Zealand) contributes substantial sums. As time has passed the estimates for the new work in Pakistan, such as the Mangla Dam on the Jhelum and the Tarbela Dam
on the Indus, have steadily increased and all the donors have been required to raise their contributions several times.

Nothing to do with irrigation is simple, and the canals with which the well-intentioned British engineers so confidently netted the country had already created acute problems of waterlogging and salinity. It seems paradoxical that a desert could be waterlogged, but below the sands of the Punjab and Sind, often not very far below, there is a layer of water known to the peasants and tapped in a hundred wells. Since land was useless without irrigation it was measured by the number of wells it bore; a ‘well of land’ was about twenty-five acres. These wells, Lieutenant Wood reported, were used as late as the nineteenth century not only for irrigation but in the administration of justice, for they were the scene of trials reminiscent of the ducking-stool ordeals in medieval England. The suspected criminal was made to cling to a pole in the middle of the well; an archer with his back to the well shot an arrow away from it and at the same time the ‘criminal’ sank below the water. As soon as the arrow touched the ground boys sprinted for it and brought it back to the well. If the man on the pole had been able to stay under water until the arrow was returned he was deemed to be innocent. Wood saw two suspects acquitted in this fashion.

Once the canals had been built and water was easily available the peasants spread it widely and too generously. The canals themselves were mostly unlined and therefore leaked. Steadily the watertable rose (in places it is now only five feet below the sand) and the strong sun drew the water to the surface in summer. Unfortunately it came up bearing poisonous salts and as it evaporated they were left in the soil. Cotton died first; one after the other different crops were affected. Whole stretches of the plains now gleam white and are utterly barren. A number of tubewells, hollow pipes fitted with pumps, were driven deep into the ground below the saline water to provide fresh water, lower the watertable and leech out the poisonous salts, but they were expensive and deteriorated rapidly. In 1946 a senior British engineer wrote: ‘Heroic measures are essential if the Punjab is not to be destroyed.’ Foreign advisers were called in to help by Pakistan; tubewell pilot projects were set up in several areas but it became clear that what was needed was a massive attack; small schemes were practically useless. By 1963 nearly 2,000 improved tubewells had been sunk in an area of 1,200,000 acres between the Ravi and the Chenab; a year later the watertable
had been significantly lowered and crops had greatly improved. But the operation had cost about $35 million U.S. dollars and the problem of well deterioration was only partly solved; moreover some areas in the south are unsuitable for tubewells, because of the nature of the subsoil, and other forms of drainage must be devised.

The basic difficulty, of course, is the shallowness of the slope of the plains to the sea, and although this has long been appreciated and various schemes to improve the plains' drainage have achieved a limited success, it will take all the ingenuity of the engineers, and vast quantities of money, to overcome it.

At Hala, halfway between the Sukkur barrage and the sea, stands one of the many small observation offices, for the Indus must be constantly watched all through the Punjab and Sind. The engineers speak of the river as 'attacking', as though it were an army. 'It attacks always when it is rising or falling,' says one of them. 'Then there is erosion and danger. When it is stable, even if it is high, it is not so dangerous.' In winter the Indus crawls sluggishly along a narrow channel between wide banks of glistening clay where the peasants grow melons to harvest just before the flood season. From June to August the engineers mount day and night watches to see how the 'attack' is going, and the river steadily rises until it surges past level with their doorstep. Their maps show shifts of course of a mile and more even within recent years. In each of these shifts the river destroys part of the plains it has made, and builds elsewhere. In every sense the plains belong to the Indus. It made them, and it is still making and unmaking them.
The continual changes of course that are the habit of the Indus in the plains have plagued everyone who has ever tried to use the river for transport. In the mountains Hedin and other explorers took dinghies downstream for short distances; goatskin rafts and primitive wooden boats may be used to transport goods and people; ferries operate along overhead wires or by oar. But the river is so narrow and violent for its first thousand miles and its bed so thickly sown with rocks, that any regular traffic of boats is out of the question. Below Kalabagh, however, once the river has room to stretch, it might be expected to be easily navigable.

It proves to be still dangerous, though the dangers are now different. Even where the general line of the river is more or less stable the water runs in several different channels between islands, and the main stream unpredictably shifts from one side of its bed to the other. Sandbanks suddenly appear in new positions and are swept away in the following seasons’ floods. The contours of the banks and the patterns of the islands continually change. Up at Kalabagh Edwardes had been required to adjudicate on the social problems that these changes occasion; lower down the Indus, according to Lieutenant Wood, things were settled by the action of the river itself. When a new island appeared in midstream, and was naturally claimed by the dwellers on both banks of the river, a rower set out from each side carrying half a dozen earthenware jars. Half a mile upstream of the island all the jars were released simultaneously. As they floated down all the local people watched their progress towards the island anxiously, for the island would accrue to the bank past which bobbed the smaller number of pots. With the river twining and tangling differently each year it is impossible to produce a chart that will remain true to fact for any length of time. Even figures of river depths, wrote Wood, are not only unreliable but ‘positively injurious; for when a practical man at a distance casts his eyes over the contents of a table purporting to give
soundings in a river’s channel, and finds the least depth to be two fathoms, he very naturally concludes that a boat constructed to draw only nine feet will navigate the said river. No conclusion could be more erroneous; the reasoning is . . . not applicable to the ever-changing channels of our Indian rivers.11 Moreover, the river runs south at up to seven knots for more than half the year; even in winter it makes over three knots in places. In neighbouring reaches there are wide variations in speed of flow; everywhere submerged shoals set up eddies and unexpected currents.

In spite of the difficulties, the Indus evidently carried cargoes in very ancient times. Two relics of the earliest riverine civilization depict boats apparently made of papyrus reeds (like the contemporary Egyptian boats), one equipped with a mast and yards for sailing. People who built cities from the Ravi to the mouth of the Indus must certainly have used the rivers for communications and for transporting bulky and heavy goods such as rice and cotton, wood and stone. The Aryans who supplanted them knew a great deal about horses but probably not much about boats; at all events they have left no indication that the rivers were important to them.

In the sixth century BC Scylax sailed down the Indus at Darius’s behest; little is known of his voyage, but of Alexander’s voyage down the river 200 years later Arrian gives a series of vivid pictures. Alexander and the army joined Nearchus’s fleet on the Jhelum after returning from the Beas. Alexander made the proper sacrifices: ‘Stepping aboard, he stood in the bows of his vessel and from a golden bowl poured a libation into the water, solemnly invoking the river.’2 In formation, so as not to ram each other, the Greek vessels, some 2,000 in all, rowed out onto the Jhelum.

One may imagine [wrote Arrian] the noise of this great fleet getting away under oars all together; it was like nothing ever heard before, what with the coxswains calling the in – out, in – out for every stroke and the rowers’ triumphant cries as, like one man, they flung themselves upon the swirling water . . . The natives . . . had never before seen horses on shipboard, and the sight of them crowding the barges filled them with such amazement that all who witnessed the departure of the fleet followed it along the bank for miles, and other friendly tribesmen who were near enough to hear the cries of the rowers and the dash and clatter of the oars came running to the river-bank and joined in the procession, singing their barbaric songs.3

Things were not to continue so smoothly and pleasantly.
Where the Jhelum joined the Chenab 'the water made such an appalling shindy that the men at the oars stopped rowing in sheer panic, and the coxswains, dumb with astonishment, ceased to call the time'. The crews pulled themselves together, rowed hard, and got through, though not without some damage. The ships continued downstream, no longer serenaded by the natives but attacked by them. At intervals Alexander marched off to subdue nearby tribes and towns. In one battle, probably at Multan, he was severely wounded; during his convalescence Nearchus built more galleys and cargo vessels and the enlarged fleet assembled at the junction of the Panjnad and the Indus. A city could be constructed here, said Alexander, and dockyards; he hoped it would become a great and famous centre. Perhaps it did. There is nothing to be seen today but dunes of sand patched with salt. Further progress down the Indus was punctuated by a series of battles in which foot-soldiers, cavalry, charioteers and elephants slaughtered and trampled each other to death. The Greek victories almost always ended in the execution on the local leaders who had dared to oppose Alexander. It took nine months for Nearchus’s fleet to reach the mouth of the Indus from their cheerful embarkation a thousand miles north on the Jhelum. He had started in the autumn, so he would have had the benefit of the flood under him only towards the end of the voyage, but of course the journey would have taken much less than half the time if Alexander had not been continually delayed by fighting and by his passion for establishing new cities.

In the centuries that followed there must certainly have been, at times, a considerable traffic up and down the Indus. Roads were poor and pack animals expensive, and the river would be the cheapest and most convenient means of carrying heavy goods between north and south. There were probably district pilots, familiar with the maze of channels on their particular stretches of the river. The southward voyage, with the current, would not be arduous but boats would have to be dragged upstream except in the summer when, as Lieutenant Wood later noticed, the south wind can blow strongly enough to carry well-canvassed boats slowing up against the flood. But all river traffic was vulnerable to the recurrent waves of invaders and the endless struggles for power in the Indus plains. No merchant would care to entrust his goods to a slow and clumsy boat when Mahmud of Ghazni was rampaging across the Indus or the Mongol horsemen were known to be in the offing.
In the fourteenth century Ibn Battuta sailed down the Indus in style with an acquaintance who had just been appointed as a governor in Sind. The party comprised fifteen ships. In the centre of the principal vessel, which was propelled by forty rowers, there was a wooden cabin reached by a staircase; the governor sat on top of this cabin, his suite in front of him and slaves to right and left. Four ships sailed alongside, carrying the governor’s ‘standards, kettledrums, trumpets and singers. First the drums and trumpets were sounded and then the musicians sang, and this continued alternately from early morning to the lunch hour. When this moment arrived, the ships closed up and gangways were placed from one to the other.’ At night they made camp on the river banks, posting sentries against marauders. At dawn, to the sound of trumpets and drums, they set off again.

Under the Moguls the river was used for commerce on a large enough scale to warrant the establishment of customs houses along its banks, as Sebastien Manrique found when he sailed down it in the seventeenth century, possibly the first European to do so after Alexander’s soldiers. He was a Portuguese, an Augustinian priest attached to a mission in Bengal. He seems to have spent more time on the road than at his mission, for he travelled as far as China and the Philippines and back to Europe overland via Afghanistan, Persia and Palestine. Courageous and physically tough, he must also have been sensibly tactful in dealing with the people through whose countries he passed; he hated Moslems and Hindus (the ‘Heathen’) but would never have got out alive if he had allowed himself to show his feelings too clearly.

In 1641 he arrived in Lahore to ask for permission to rebuild certain churches that the Portuguese had built in Sind that had now been destroyed; this was granted and he went off to Multan with special permits to show at the Indus customs points. In Multan he found a trader who agreed to sail him down the river. The boat, he said, was a *patala* or *quiste*. Today there are still *kisties* on the Indus, about thirty-five feet long, with a rounded bow where the two rowers stand and a high stern on which the helmsman operates a large triangular rudder by means of a complicated arrangement of ropes and crossbars. Manrique, the trader suggested, might perhaps take his trading goods through the customs ports under the special permits from Lahore; but this was beneath the dignity of the Church. Manrique’s refusal to do any tax-cheating was accepted without surprise or resentment.
Nine mercenary soldiers were embarked on the trader’s ship; on inquiry Manrique was told that there were many pirates on the river. Before they set off, therefore, he had overhauled his own two muskets and a pistol, and added ‘some grenades and stink-bombs’.

There was little wind but as it was September the current was still strong, the rowers ‘driving the vessel along as if she were an arrow’. At night they anchored; occasionally they stopped during the day for customs clearance or for a rest. The river banks were cultivated and in the many villages food was cheap and plentiful; the fish were excellent, particularly the shad. From his cabin on the poop Manrique watched the fishermen paddling about. They lay on large earthenware pots, so that their hands were free to wield spears and their legs for swimming; when they caught a fish they put it into their earthenware pots.

In Sind, as anticipated, the river pirates appeared. Two vessels suddenly rowed towards them throwing ‘a mass of arrows, stones and fire-hardened javelins’. Manrique’s ship drove them off with grenades and fire-bombs. One of his crew, fatally wounded, insisted on dying ‘as a Pagan without asking to become a Christian, although I had urged him to it’. The funeral obsequies ‘commending his wretched soul to the care of his false gods’ were ‘ridiculous rites which nauseated my very soul’.

Eighteen days after he left Multan, Manrique arrived at Thatta near the mouth of the Indus. The distance is about 450 miles, so the average daily run was only some twenty-five miles; given the favourable current there must have been quite a number of pauses for rest and refreshment.

Portuguese influence in the Orient was already on the downgrade when Manrique sailed down the Indus, for the British had achieved decisive naval victories in the seas beyond India and decisive concessions at the Mogul court in Delhi. In the eighteenth century, with the gradual collapse of Mogul power, the British began to move forward from their first bases in the east and south of the subcontinent and by the end of the century they were casting an interested eye at the Indus. Various explorers investigated the delta country but further inland the river was unknown. In 1830 the governor of Bombay wrote:

The navigation of the Indus is important in every point of view; yet we have no information that can be depended upon on this subject, except of about seventy miles from Tatta to Hyderabad . . . . With regard to the Indus above Hyderabad, there can be no doubt of its
being, as it has been for more than two thousand years, navigable far up.'

Alexander Burnes was therefore sent up the river in 1831 with King William’s horses for Ranjit Singh; he took with him a junior army officer, an Indian surveyor and an Indian doctor, and instructions to survey the river: ‘The depth of the water in the Indus, the direction and breadth of the stream, its facilities for steam navigation, the supply of fuel on its banks, and the condition of the princes and people who possess the country bordering on it, are all of the highest interest to government. . . . the slow progress of the boats up the Indus will, it is hoped, give you every opportunity to pursue your researches.’ At Hyderabad he was lent a jumtee or state barge for the next stage of his journey.

It was about sixty feet long, and had three masts, on which we hoisted as many sails, made of alternate stripes of red and white cloth. . . . We hoisted the British ensign at the stern of our pinnace, the first time, I suppose, it has ever been unfurled on the Indus; and the little vessel which bore it out-sailed all the fleet. I hope the omen was auspicious, and that the commerce of Britain may soon follow her flag. We moved merrily through the water, generally with a fair wind, anchoring always at night, and pitching our camp on the shore. When there was wind they sailed; in the calms the barge had to be dragged upstream.

At the border of Sind the jumtee returned to Hyderabad; the Nawab of Bahawalpur, next region to the north, then provided fifteen boats for as long as Burnes’s voyage took him through his territory. On the Punjab frontier Ranjit Singh had made further arrangements for the last stage, to Lahore. All this took Burnes five months; it was indeed ‘slow progress’. But none of the party were sailors; they had plenty of time to observe but not enough technical knowledge to interpret what they saw. Five years later, when the British again determined to survey the Indus, partly for commerce but more for politics, Burnes, now famous for his journey to Bokhara, was put in charge of the new expedition which was to end at Dost Muhammed’s court in Kabul. This time he took a professional with him, Lieutenant Wood, and as far up as Attock the Indus and the boats that sailed it were evaluated in detail. Most of what Wood wrote about the river in 1836 and 1837 is true today.

Average depths in the flood season were some twenty-four
feet; in winter they might be as little as nine feet. Above the delta navigation was everywhere ‘intricate’; ‘among the numerous channels that present themselves, it is not always an easy matter to select the right one’. They ‘imperceptibly glide into each other; and should the channel selected by a boat descending the river be that which the stream is in the act of abandoning, she must be moved into the new-formed channel as soon as a decrease of soundings gives warning of the fact’. No cargo vessel would attempt to sail downstream without a pilot-boat to guide it. ‘These are small cheap skiffs, managed by a couple of men, one of whom standing on a platform in the bows gives the depth of water, while the other, with his scull over the stern, steers the boat.’ Over a long voyage the pilots were too expensive for a single cargo boat to afford and boats came down the river in convoy. The only cargo was grain, shipped after the spring and autumn harvests; the latter is much larger and at one town Wood watched a winter fleet of forty-two cargo boats making down the Indus. These were doondahs, bigger than the more heavily constructed duggahs that he saw later on the rocky and dangerous reach between Attock and Kalabagh, but built along the same lines. The two sides were joined to the flat bottom by crooked timbers; at bow and stern the bottom planks had been lubricated and forced upwards, with a tackle, over a period of many days. The doondah drew only five feet and the slight curve in her bottom gave her buoyancy in eddies and strong currents; if she struck a sandbank the bluff bow not only parried the shock but acted as a pivot, so that instead of lying broadside to the stream she swivelled round and could be easily refloated. She steered badly, for her quarters were too angular, and she was not solid enough. All the same she had many advantages, on the river, over the conventional European vessel with its sharp bow.

Wood wrote feelingly on this matter, and with personal experience. In 1836, before he joined Burnes, a Persian merchant in Bombay who had bought the first steamboat to operate on the river invited Wood to take her up to Hyderabad. Her name was the Indus. Her engines, ten horsepower, were often not strong enough to stem the current. On one occasion Wood found it was necessary to second the power of the engine by a tracking party on shore, and a number of Hindoo countrymen were employed for the purpose. All went well, till the bow of the boat got inclined to the direction of the current, when out she shot like an arrow into the stream, and with her dragged the trackers. Casting off the drag-rope
prevented accident; but the situation in which it left the Hindoos was not a little grotesque. Between the firm ground and the river lay a strip of recently placed alluvium, and in this the Sindees were planted at various depths from the middle downwards.\textsuperscript{11}

If there was a favourable wind, the crews of the \textit{doondahs} rigged masts on beams lying across the gunwales and hoisted great square sails. A fleet of them was then a sight to see: ‘First, the large white sail of the headmost boat is discovered at the top of the reach, then another, and another, until the surface of the river becomes studded with those uncouth yet really interesting objects.’\textsuperscript{12}

Wood describes other boats: the \textit{cow-tell}, a beamy ferryboat; the \textit{zohruk}, a lighter type of cargo boat than the \textit{doondah}; the Attock \textit{duggah}. So little good timber was available that the boats often had to be made of innumerable small pieces fastened by bamboo pegs; in the floorboards of one boat he counted 673 separate patches of assorted woods. Lieutenant Carless, another naval officer who surveyed the mouth of the Indus at about the time that Wood was making his voyages upstream, wrote of the \textit{dundi}, a flat-bottomed cargo boat used in the delta, sometimes as much as eighty feet long and sixty tons in weight: it had two masts, a square sail on the after mast, a lateen on the forward. These boats and the \textit{quiste} described by Manrique still sail today on the Indus, though in comparatively fewer numbers, together with the fisherman’s smaller, slimmer dinghies. In different stretches of the river the names are different and there are local variations in size; above Kalabagh nobody tries to sail; below it the boats have movable masts as well as oars; lower down again, where the winds are more important, they have fixed masts. Broadly speaking they are all the same shape, however, flat-bottomed, mostly canoe-ended but sometimes square-sterned, and fitted with huge clumsy rudders; although, as Wood pointed out, this shape has certain advantages on the Indus, it is not ideal for bad weather. So long as they have sufficient warning of storms to get into shelter the \textit{doondahs} and \textit{kisties} and \textit{zohruks} and \textit{dundis} survive. For the Indus, the river like a sea, can produce storms like the sea’s.

Generally the winds follow the line of the river, as Wood noted, blowing from the south in the six summer months and from the north in winter. The northerly can be violent and often carries clouds of sand; as the air darkens the wise boatman pulls for the weather bank. ‘An unsheltered position in deep water,
with the open river to windward, generally settles the fate of an Indus boat. If loaded, she at once fills and goes down, and, if empty, the shaking produced by a short chopping sea soon opens the seams of a vessel that has no beams to hold her frame together.\textsuperscript{13} A strong southerly blowing up against the summer flood-stream sets up ugly short waves that can easily swamp a boat. There are gales at all seasons and the boats are fragile. So is the land. If by wind or current a boat is driven hard against a high bank, wrote Lieutenant Carless, a great mass of earth and sand may break off, fall upon her and sink her. About forty or fifty \textit{dundis} were lost each year on the lower Indus.\textsuperscript{14} A few years later another British officer saw the river ‘throw an iron steamer of sixty h.p. on its banks’.\textsuperscript{15}

Wood’s main job was to discover whether the Indus was navigable by steam vessels. He later came to the conclusion that there were ‘insuperable obstacles to navigation’\textsuperscript{16} but his first report was rather less negative. Any ship to be used on the river would have to be small and shallow-draughted, and for fuel she must depend largely on wood, unless coal were to be brought out from England; if the speed of the paddle steamers was not to be cancelled out by recurrent stops to collect wood, often from some distance away from the river, floating fuel depots should be built off the banks.

While Wood had been thinking about the river as a waterway, Burnes, in accordance with his instructions, had been thinking about its usefulness for trade. He considered the various towns along the Indus in relation to the roads running east and west, and concluded that Dera Ghazi Khan would be the best place in which to develop a market. Wood was unenthusiastic about any of them: ‘I do not believe there is a healthy spot on the banks of the Indus; in this respect there is little choice.’\textsuperscript{17} Burnes was not to be damped. The Indus was admittedly a difficult river but with the proper regulation of navigation and a reduction in taxes on cargoes, it could become an open highway for trade between Asia and England. ‘There are few rivers in the world where steam might be used with better effect than on the Indus.’\textsuperscript{18}

It was argued, especially by people who disliked Burnes, that the Indus had been open for centuries and that trade was already flowing freely across it and down it; no new development was necessary. There was some truth in this. There was more practical force in Lieutenant Wood’s grim facts and figures about the river itself, as successive companies were to discover.
By 1840 four iron vessels flying the British ensign were operating on the lower Indus. Their performance was disappointing, however, because they drew too much water and their engines were too weak for the current. From the delta town of Thatta they took as much as eight days to reach Sukkur in the flood season; the distance is about 330 miles and even assuming that they stopped every night for ten hours or so they cannot have made more than three miles an hour over the ground. (With the current the reverse journey took less than twenty hours – an average speed, assuming no stops, of near sixteen knots!) In 1856 the Oriental Inland Steam Company obtained an annual subsidy from the Government to operate a river line and engaged Wood as manager; he put forward various proposals designed to help the Company’s ships to face the special conditions of the Indus but his advice was not followed and the concern was ruined.

In 1861 Wood joined another company and superintended its operations until his death some ten years later; this company maintained a river service, in conjunction with the new Sind Railway, until 1883. Between delays to collect fuel, engine breakdowns and the contrary current, the ships could still only crawl upstream. As an American historian summed up the position, the fact was that ‘despite the introduction of stern-wheelers modelled on the Mississippi types, it proved impossible to build a steamboat of sufficient power to ascend the river without making the engines so heavy as to require a draft too deep to navigate the shallow and constantly shifting channels of the lower Indus’.  

As soon as the British started building railways up the Indus, river traffic declined. Trains were cheaper and faster and more reliable than boats and from the 1860s on their tracks steadily extended north from Karachi. A number of boats continued to carry goods along the river and some of its canals, but by the end of the century the primary role of the Indus and Panjnad Rivers was judged to be irrigation: ‘The waste of water that would be necessitated by keeping up navigation is out of all proportion to its value. It would be like keeping an elephant to draw a go-cart. Navigation on the rivers in the Punjab or Sind is doomed, and it is useless to try and save it. Navigable canals do not answer in North India, and traffic will have to be by railway.’ As late as 1908 the Imperial Gazetteer could report ‘There is a considerable trade on the Indus with Sind . . . by means of rude country craft,’ but added sadly: ‘As a channel of navigation, the Indus has
disappointed the expectations that were at one time formed.'21

The construction of the great barrages finally put paid to any idea of long-distance river traffic. Boats still work between them, for they are far apart: small light rivercraft punt and row up and down the river, and an occasional cargo boat, loaded to its gunwales, creeps upstream close to the bank, its great square sail, patched with a dozen colours, bellying out before the southerly monsoon. But the days when the Indus bore fleets of vessels on its wide flood are over.

On misty mornings the ferries take sleepy countrymen over the yellow-grey river past flat islands loud with birds. Some are rowed, some are powered. At Dera Ismail Kahn the engined ferry boat is almost a museum piece. Built in 1917 in Glasgow, about ninety feet long, she served at Bazra in the First World War and then somehow found herself on the Indus, at Kalabagh. When the Kalabagh bridge was built in 1931 she was moved downstream to Dera Ismail Khan where the existing ferry already merited the scrapyard. Her decks are mostly open but there are two small saloons at the bow for gentlemen and an enclosed area for ladies at the stern; the paddle wheels throb and rattle. Various bits of machinery carry different names – ‘Glasgow’, Newcastle-upon-Tyne’ – and different dates. She is deeper-draughted than Lieutenant Wood might have advised and often cannot get into shore or, worse, gets stuck on a sandbank in mid-stream. For a First World War veteran, however, she works gallantly.

Pakistan has been considering the establishment of an Indus flotilla to operate between the delta and the barrage at Sukkur; vessels can pass the Ghulam Mohammad Barrage near Hyderabad, but there are not even fish ladders at Sukkur, much less locks. The basic problem is exactly the same today as when Wood sailed the river 150 years ago: ‘The route upstream from the Indus delta is not clear as yet; it is being worked out by experts.’22 It seems unlikely that the route will ever be clear, in the sense of being stable. But the great barrages will do much to control the force of the flood stream and it may be possible to curb the Indus’s tendency to meander. Given good local pilotage, boats with powerful engines (possibly hydrofoils or hovercraft, to overcome the draught problem) should make the passage without difficulty. It would be an interesting trip, for there are nearly 5,000 years of history in Sind.
THE COUNTRY OF THE CITY OF THE DEAD

In the middle of the nineteenth century a British engineer called Brunton, who was engaged in building a section of the Punjab Railway from Multan to Lahore, had what he considered a stroke of luck; he found a quarry full of old bricks, most useful for his railway track. Only some seventy years later did archaeologists realize that Brunton’s ‘old bricks’ were actually the remains of an ancient city. This was Harappa, situated near the Ravi and about half-way between the modern towns of Multan and Lahore.

Harappa was discovered in 1921. In the following year, far to the southwest, another large city of the same type was found on the Indus, Mohenjodaro, the City of the Dead. There had always been a tradition in India that its civilization went back to prehistoric times, but in the absence of any convincing material evidence this tradition was generally discounted by scholars. Now it was vindicated, for the ruins at Harappa and Mohenjodaro proved beyond doubt that a hitherto completely unknown civilization had flourished along the great river more than 4,000 years ago.

Further discoveries were made in the following years; by now over seventy ancient towns have been identified between the Punjab and the coast, scattered down the valleys of the Ravi, the Sutlej and the Indus over a distance of a thousand miles from north-east to south-west, and along the coast of the Arabian Sea for more than 400 miles; in total an enormous area. Almost certainly more sites are still awaiting discovery, and some that are known have not yet been fully examined; Mohenjodaro, for example, is flooded in its lower levels and its first and oldest buildings cannot be investigated until the water is pumped out. Similarities in the layout of the towns, in the construction of buildings, in seals, jewellery, statues, toys and other artifacts demonstrate that these widely spaced settlements were linked to
each other in trade and probably in their administration and political organization. None of the more recently discovered towns is as large as Harappa or Mohenjodaro and it seems likely that these two functioned as the capitals of the northern and southern provinces of the valley civilization. Little is known about the system of government; there is so far no sign of 'royal' tombs or any other clear indication of monarchy, though there were personages now described as 'priest-kings'. However they were governed, this great complex of associated towns lasted for nearly a thousand years. Archaeologists generally agree that its maximum dates were 2500 BC to 1500 BC, though they may have been shorter, possibly only 2300 to 1750; there is not enough evidence yet to be positive.

But sufficient material has already been brought to light to build up a picture of the Indus valley civilization. Its most striking feature is its high level of organization. Harappa and Mohenjodaro, almost identical, are early examples of utilitarian town planning. The streets run at right angles to each other; citadel, granary and baths stand in strategic points. The houses, mostly of baked brick, were small cubical affairs very similar to the modern houses of the Punjab and Sind. Artisans and labourers lived in tiny dwellings in one quarter, the wealthier citizens in slightly larger houses in another. There were many wells and the people were preoccupied with ablutions and drains. The houses apparently had no frescoes and little in the way of ornament, but many were equipped with baths and seat lavatories; bricklined channels punctuated with inspection traps ran along every street and the municipal cesspools were well maintained. A modern Pakistani scholar writes: 'Drains are hardly romantic, but those of the Indus valley cities are among their chief glories.'

There seem to have been no open spaces or public parks, no theatres or places of public entertainment. Everything speaks of an industrious and well-regulated society; as a British archaeologist puts it:

One imagines these warrens of streets, baking under the fierce sun . . . as human ant-heaps, full of disciplined, energetic activity, supervised and controlled by a powerful, centralised state machine; a civilization in which there was little joy, much labour, and a strong emphasis on material things. Modern parallels are not difficult to find. Was this, perhaps '1984' - B.C.?  

For their livelihood the scattered towns depended on what
they could grow locally – wheat, barley, dates, cotton and sugar – and on trade between themselves and the outside world. Characteristic Indus seals and polished flint weights and pottery have been found in the ruins of ancient cities in the Persian Gulf and Mesopotamia, so trade to the west was probably the main reason for the foundation of the coastal towns. Little is known about the religious practices of the Indus towns; there seem to be no temples or shrines, but a few small terracotta statues indicate that a Mother Goddess may have been worshipped or a many-armed divinity, precursor of the Hindu gods. One larger head, identified by archaeologists as that of a ‘priest-king’, is impressive but unprepossessing; it has a flat back, wide thick lips, a shaven upper lip and a neat short beard round the chin; the hair, worn low on the forehead and down to the lobes of the ears, is bound with a fillet; the eyes are slitted. Whoever this man was he looks arrogant and cruel and ruthless.

Other statues show more humour; an old man with a wise, sly smile, a naked girl in bronze always described euphemistically as a ‘dancing girl’ provocatively swinging her hips. Most of the small figures are heavy and lumpish, however, though some of the toys work ingeniously; animals’ heads nod when a string is pulled, and little clay birds can be made to whistle. There are small models of carts pulled by bullocks; to this day the same type of cart is used in Sind: flat, with stakes sticking outwards and upwards at each corner, either opensided or filled with plaited basketwork. The Mohenjodaro toys show the cartwheels as completely solid, perhaps because of the difficulty of making holes in terracotta; the real-life wheels have two small spaces opposite one another. As in the ancient toys they are fixed to a cross-axle which rotates with them between wooden pins on the underside of the cart and they are kept in place by the weight of the cart itself; if the platform is raised the wheels and the axle can be pushed out in one piece. Wooden wheels turning on a fixed axle make a terrible squeaking and groaning and all the roads of Sind are loud with the passing of carts at dawn and in the evening.

The people wore simple ornaments of bone, ivory, shells and terracotta; they played dice and a game like chess in which pieces moved on a squared table. They used copper and bronze for pots and tools and for some of their statuettes.

The most distinctive survivals of the Indus valley civilization are hundreds of small steatite seals, about half an inch square,
The Plains

inscribed with signs that have not yet been deciphered and also often representing animals such as tigers, rhinoceros, antelopes, crocodiles, buffaloes and elephants. The elephants seem to be saddled or draped, and therefore domesticated; nowhere else in the world were these great beasts tamed by men at such an early date. The purpose of the seals is still not clear: they may have been used for marking merchandize or they may have been personal identity discs. They are the only epigraphic record that the Indus valley civilization has left and scholars have been trying to interpret them for fifty years. A recent effort, entitled, with a disarming question-mark, 'The Indus script deciphered?' offers a sort of crossword puzzle solution that depends on puns in words and associations in pictures but it seems unlikely that so highly regimented a civilization, apparently more interested in drains than in art or games, should have developed anything so subtle.

The origin of the people of the Indus valley civilization is still not entirely clear. They probably came from the mountain plateaux in the west, attracted by the fertility of the river valleys. In the mountains of the Makran a hundred miles to the west of Mohenjodaro there are very ancient watercourses tunnelled through mountains from deep wells; perhaps the builders of these waterworks were predecessors of the people who first settled in the Indus valley. For any tribes who intended to settle near the river, however, flood-control was almost as important as irrigation. Sir Mortimer Wheeler, who has excavated many of the valley sites, says: 'A society determined to profit by the vast opportunities of the plain must needs have also the genius and the skill to master an exacting and minatory environment, and must have it from the outset. A civilization such as that of the Indus cannot be visualized as a slow and patient growth. Its victories, like its problems, must have been of a sudden sort.' His explanation for its victories is based on the fact that the riverine civilizations of Mesopotamia and Egypt had been established shortly before; 'ideas have wings', and the founders of the Indus valley civilization 'in their running battle against more spacious problems than had been encountered either in Mesopotamia or in Egypt . . . were fortified by the consciousness that it, or something like it, had been done before.'

About 1500 BC, or a little earlier, their civilization came to an end. Before this it had evidently undergone severe vicissitudes, at least at Mohenjodaro, for its buildings show signs of at least three
stages of deterioration. Apart from the differences in the methods and types of construction the only physical clues are half a dozen groups of skeletons, some of which show evidence of violent death. Nobody can say for certain how the Indus valley civilization ended, though many theories have been advanced. The final collapse was probably the result of a number of factors, starting with a series of natural disasters connected with the Indus itself. Along the coast, then some 200 miles south of Mohenjodaro, there were earthquakes at about the time that Mohenjodaro ceased to exist; if the river mouths were temporarily blocked with silt the floods upstream would suddenly become wider and deeper.

It seems that when Mohenjodaro was built the Indus ran close to it; its channel is now some three miles to the east. A change in the course of the river might have made the agricultural economy and riverine commerce practically impossible. In the prosperous years the population would have increased; now it could not be fed. Already beset with their own difficulties, the city leaders probably had to face raids from the hills of Baluchistan and Makran. The tribesmen in the bare mountains must always have looked longingly down to the rich fields cultivated by the townsmen of Mohenjodaro; sensing the increasing weakness of their owners they would intensify their raids on cattle and crops. Perhaps there came a moment when the fit and energetic people of the town decided that it would be better to leave it and make a new settlement elsewhere. Most of the skeletons that have been discovered are of children or old people who might have been left behind when the final decision to evacuate the city was taken. On the other hand, the Aryans, pouring in from the north-west, may have overwhelmed the cities and towns on the Indus by arms; but if so, why have so few skeletons yet been discovered (less than forty all told) and none of these apparently of fighting men?

About the end, as about the beginning, of this great civilization there is much that is so far unknown, and may never be known for certain. What is left today is a huddle of small red-brick houses intersected by narrow right-angled lanes, the ruins of some larger buildings and of the Great Bath and the famous drains. A Buddhist stupa built more than a thousand years after the fall of Mohenjodaro is the highest building in the town, rising to about seventy feet above ground-level; from here there are distant glimpses of the blue-grey Indus to the east; in all
directions the country stretches away completely flat, sometimes covered with small scrubby trees, sometimes white with salt. For like so many other regions near the Indus Mohenjodaro is threatened by waterlogging and its concomitant salinity. Even in the short time since the first excavations were made the watertable in the area has risen as much as fifteen feet, and salinity has increased to the point where some of the bricks crumble into fine powder under light pressure. Sir Mortimer Wheeler says that a number of the monuments in Mohenjodaro are already ‘ruined beyond recovery’ while some others are in a ‘deplorable condition’. The immediate need is to lower the watertable, a very large and expensive undertaking but one which would not only preserve the existing ruins but might lead to exciting new discoveries since ancient remains are known to exist thirty feet below the present level of the water.

Some of the towns of the Indus civilization may have fallen to tribal attacks from the western mountains before the Aryans arrived on the scene from Central Asia. With the appearance of the Aryan chariots the whole civilization was doomed. Harappa was destroyed possibly as much as a generation before Mohenjodaro, for once in the river valleys the Aryans, stopping to sack towns along the way, lost momentum. They had themselves never been an urban people but warriors and nomads; slowly, in the new climate and conditions of the land they occupied, they became farmers, built (or usurped) villages and much later formed kingdoms in northern India.

In Sind the Aryans settled on the Indus and may have traded to the west by sea. Few records of any sort have survived between the fall of the Indus valley civilization and the Arab invasion more than 2,000 years later. Ruins of Hindu temples and Buddhist stupas stand here and there; in fact the whole country is studded with ruins. After the destructions inflicted by nature and by man, however, only teams of archaeologists furnished with unlimited funds could make much of the poor rubble that remains, and compared with such valleys as the Nile and the Euphrates the lower Indus region has been neglected. After Scylax’s voyage down the river, Darius is known to have added Sind to the list of his Indian conquests, more as a matter of form than an assertion of effective control. Accounts of Alexander’s and Nearchus’s journey concentrate largely on battles until the fleet reached the very mouth of the Indus, though Nearchus did find time to notice the clothes of the people:
The dress worn by the Indians is made of cotton produced on trees. But this cotton is either of a brighter white colour than any found anywhere else, or the darkness of the Indian complexion makes their apparel look so much whiter. They wear an under-garment of cotton which reaches below the knee halfway down to the ankles and an upper garment which they throw partly over their shoulders and partly twist in folds round their heads. The Indians also wear earrings of ivory, but only the very wealthy do this. They use parasols as a screen from the heat. They wear shoes made of white leather and these are elaborately trimmed, while the soles are variegated, and made of great thickness, to make the wearer seem so much taller.

One of the Chinese pilgrims, Yuan Chwang, travelled through Sind about AD 640 and reported that the government (apparently then independent) held sway over four outlying provinces (which may have stretched as far north as the Panjnad) and the country produced grain and metals and had oxen, sheep, dromedaries and mules. It is difficult to identify the places he mentions and only when the Arabs marched up from the delta in 711 does a clearer picture of Sind emerge.

In one Arab version, their invasion of Sind was provoked by attacks on a few peaceful Moslem merchants who, arriving there to purchase female slaves ‘and other articles of lawful commerce’, were imprisoned or killed. In another ‘a few Arab ships carrying Muslim ladies and also some presents from the King of Ceylon to the Caliph were robbed while anchored’ in the delta. In retaliation the Caliph sent punitive expeditions and finally in 712 a force of 12,000 infantry and camel cavalry under Muhammad Bin Kasim, his son-in-law, then only seventeen. After conquering the delta towns he marched up the Indus. At Aror he was faced with a determined resistance which included troops mounted on elephants, but the Arab rockets so terrified the animals that they threw themselves into the Indus. Within a matter of months Kasim had taken Multan. He enjoyed his triumphs for only a very short time.

One of the Hindu Rajas he had killed was the father of two beautiful girls whom Kasim dispatched to Damascus to join the Caliph’s harem. On arrival one of them modestly protested that she was unfit for the royal harem as Kasim had already raped her. The Caliph, infuriated by his subordinate’s insult, immediately sent out orders that Kasim be sewn alive into a raw cowhide (a slow and terrible death as the hide contracts) and returned to Damascus. The Caliph’s authority must then have been
tremendous, even at long distance, for the orders were promptly obeyed. When the body arrived the Raja's daughters, openly rejoicing that their father's death had been avenged, admitted that Kasim was innocent. They were both immediately beheaded by the Caliph.

In spite of the loss of their general the Arabs remained for a time in control of Sind. Two provinces were set up with capitals respectively in the north and south, very much as in the Indus valley civilization. Many of the local people became Moslems and mosques were built in the towns. But Indian forces began to counter-attack, the Caliphate's political power gradually disintegrated and from the eleventh to the fourteenth century Sind, like most of the lower Indus regions, was in confusion, suffering in turn from invasions by Mahmud of Ghazni, Muhammad Ghuri, the Mongols and the Afghans; its princes later acknowledged the suzerainty of Delhi but in practice were largely independent. They had the position of their country to thank for this. An English scholar writes:

Looking back through the ages it is abundantly clear how constantly Sind's history has been determined by its geography. The great eastward barrier of sandy desert has always tended to separate its destiny from that of India as a whole. . . . Sind's political connections have therefore been mainly with the north and west; and as communications even with these countries have been far from easy up till modern times, the country has remained for long periods in almost complete political detachment, ruled by indigenous dynasties.9

For the early Mogul emperors Sind was a far-distant and not very important province. Babur seems never to have visited it himself though one of the princes of Afghanistan driven south by his forces is said to have committed suicide on a boat on the lower Indus. Babur's son Humayun fled to Sind in 1540 when Sher Shah temporarily dethroned him, and married a Sindhi girl; at a town on the west bank of the Indus just north of the present boundary of Sind his fifteen-year-old wife gave birth to the boy who was to become Akbar the Great. Years later it gave Akbar particular satisfaction to incorporate Sind more closely into his Empire. The connection with Delhi was still pretty loose, however, and Sind generally continued to hold itself apart. Local tribes gained power in turn. In the eighteenth century the Persian King, Nadir Shah, took most of Sind from the weakening Moguls, defeating the local rulers then in the ascendant, the Kalhoras, and imposed tribute on it; at his death Sind became
nominally subject to the rulers of Kabul. The tribute then demanded by the Afghans was allowed to fall into arrears and more invasions from the west ensued. The Kalhoras quarrelled among themselves and were overthrown at the end of the century by the Talpurs. A large and complicated clan, the Talpurs at first kept peace among themselves by a straightforward division of Sind into three separate chieftaincies based respectively on Hyderabad, Mirpur and Khairpur. Time passed and a plethora of sons and cousins, complicated by a theological division between Shiahs and Sunnis, began to split the family apart.

In Sind the Europeans had been on stage for some time. In the sixteenth century the Portuguese navies commanded the eastern seas and their militant Christianity drove them to missionary work all over the Orient. In Sind they succeeded in building several churches; they also set up a trading post near the Indus. Their Eastern Empire lasted for something over a hundred years; in Sind it was the British who replaced them—not without a struggle. As early as 1613 an East India Company official was ordered to travel overland from near Bombay to Thatta to take ship. He set off in company with a party of native merchants; they found their way into Sind but before they could reach Thatta they were captured by a local chief. The merchants were hanged; the Englishman, after being robbed and kept prisoner for some weeks, was allowed to return to his base. In spite of local and Portuguese obstruction and rivalry from the Dutch, the East India Company managed to set up a trading post at Thatta in the seventeenth century but it became unprofitable and was abandoned in 1662. Just under a hundred years later it was reopened, but the Kalhoras managed to get rid of it within seventeen years. A British commercial commission to the Talpurs in 1799 was equally unsuccessful and the agent it left behind was ordered out of the country. The Talpurs, like the Kalhoras, wanted nothing to do with Europeans.

The Europeans were not to be easily turned away from the Indus, however, as they continued to be interested in the chief products of the valley: cotton and, to a lesser extent, indigo and saltpetre. French traders began to appear near the mouth of the river and the rival British sent survey ships to the delta. In 1809 a British mission under Nicholas Hankey Smith was instructed to go up the Indus and reach an agreement with the Talpur Mirs of Hyderabad. The mission was delayed for a month at Karachi while the Talpurs considered what to do about this new advance.
Eventually they decided to accept the mission; they even sent a jumtee (one of their state barges) to carry some of the British up to Hyderabad. Others rode, glad of the opportunity to survey the country. Trade on the lower Indus, wrote Pottinger, a member of the mission, was then almost non-existent; in Sind it had been crushed by the Talpurs, and all the upriver countries were unsettled. Only a few cargo boats carried grain, saltpetre, salt and firewood up or down the river. The people were 'avaricious, full of deceit, cruel, ungrateful and strangers to veracity'. This might not be altogether their fault, he thought, since their government's 'extortions, ignorance and tyranny is possibly unequalled in the world'. But they were spectacularly goodlooking. The men were 'dark in colour but . . . exceedingly handsome'. The beauty of the women was 'proverbial and deservedly so'. Pottinger was of course not allowed to meet upper-class women, but among the dancing girls he saw 'I do not remember to have seen one who was not distinguished by loveliness of face, or the symmetry of her figure, and in most instances both these requisites to beauty were strikingly combined'. The beauty of the women of Sind was one of the reasons why it was so popular with the slave-traders.

At Hyderabad the British mission became deeply involved in protocol. Smith and Pottinger were given lessons on how to behave at the Mirs' court, when to stand or sit or bow. The court was rich and splendid. The British ceremoniously offered presents on behalf of the Governor-General, as was expected of them, 'mirrors, gold watches, clocks, fowling pieces, telescopes, pistols, velvets and chintzes'. The Mirs made it clear that they felt the chintzes were too cheap. Perhaps all the gifts should be returned to the Governor-General then, suggested the British. There were no more complaints about the chintzes. Eventually Smith persuaded the Mirs to agree not to allow the French to advance into their territory. From then on, step by step, it was the British who advanced into the lower Indus valley.

In another treaty in 1820 the Mirs undertook not to allow any settlements in Sind by Europeans (other than British), or by Americans, who were apparently already capable of offering a commercial challenge to the country that had governed them only fifty years earlier. The Mirs also promised to restrain raids from or across their domains into the territories already under British control in Cutch, south-east of the Indus delta.

Five years later a tribe from Baluchistan crossed the Indus and raided down to Cutch. The East India Company promptly sent in
troops to drive them out; with this force went Lieutenant Alexander Burnes, as regimental adjutant of the 21st Bombay Native Infantry. He was then twenty years old, he had been in India less than four years. He did well in the field and was promoted. He began to learn local languages and then to travel in the Indus delta country; his enthusiasm for the river was no doubt encouraged and hardened when he was given a handsome sum of money for his ‘Memoir of a Map of the Eastern branch of the Indus’. Meanwhile his elder brother, James, a doctor in the Medical Department of the Bombay administration, had been asked to make a professional visit to Hyderabad. In view of their relations with the ruling powers of Sind, the British were astonished at this invitation. It seemed, however, that one of the Talpur Mirs – by now there were ten of them – had developed an ulcer on his back. Two of his brothers had apparently died of the same complaint and he had already made his will when somebody suggested that a British doctor might be useful. Pottinger, then the Resident in Cutch, asked James Burnes if he would go. He did not hesitate for a minute, filled, as he put it, ‘with feverish anxiety to cross the forbidden frontier and particularly to view the classic river Indus’. He was welcomed effusively – and viewed as a curiosity – at the various stages of his journey. On the banks of the Indus he felt an ‘overpowering emotion . . . in contemplating the scene of Alexander’s glories’. His Hindu attendants prayed to the river, and ‘never before did the worship of water or water gods appear to me so excusable’.

The court of the Mirs at Hyderabad, when Dr Burnes was at last ushered into it on his stockinged feet, was rich, splendid, but not garish. The walls of the audience hall were covered in paintings and its floor was bright with Persian carpets. At one end of the hall, on a large couch covered in gold-embroidered white satin, the only piece of furniture in the great room, sat a semi-circle of Mirs, wearing loose silk trousers of dark blue, long muslin shirts sashed with silk and gold and tall stovepipe hats of velvet or brocade. Everything was clean and plain and elegant and Burnes was deeply impressed. He then found himself being closely questioned in Persian, for the Mirs found him disappointingly young to be a doctor and clearly had little hope that he could do much for their brother.

Luckily for James, the illness (which he does not specify) proved to be within his scope. The only difficulty was that the sick man refused to take any medicine until his doctor had first
taken it himself; after two days of unnecessary sweating and purging Burnes insisted on a servant standing in for him. Clean dressings, purgatives and Spartan diet restored the Mir to health within ten days. After his recovery, which was immediately celebrated by a public hunt, James was overwhelmed with demands for medical assistance from all over Sind which he did his best to meet. With quinine he managed to cure fevers in several important persons; seeing this the Mirs seized his supply of quinine and refused to return any of it even when he himself, exhausted by his efforts, went sick. In gratitude for his work, however, senior officials prayed night and day beside his bed. After more than two months in Hyderabad James was ordered back to Cutch to attend a court martial that had been delayed on account of his absence and the Mirs wrote officially to the British that he had been ‘the most skilful of physicians and their best friend, and the cementer of bonds of amity between the two governments’. In the Indus delta he learnt that the court martial was over. His first thought was to return to Hyderabad but by now the family disagreements of the Talpurs were tending towards civil war and his old friends at Hyderabad advised him to keep away.

Dr Burnes’s personal success in Hyderabad never overcame the Mirs’ apprehensions regarding British encroachments, but it certainly helped his brother to a warmer welcome than Alexander might otherwise have received when he arrived at Hyderabad in 1831, en route for Ranjit Singh and encumbered with the five dray horses.

By 1832 Pottinger had been transferred from Cutch and was now the British Resident in Sind. A new treaty between the Mirs and the British provided that no armed vessels or boats should travel on the Indus, and ‘that no English merchants shall be allowed to settle in Sind, but shall come as occasion requires, and having stopped to transact their business, shall return to India’. No military stores should be carried on the Indus and taxes on cargo boats were to be fixed by agreement between the Talpurs and the British. For a few years life was peaceful in Sind. The Talpurs resolved their family disagreements, the Afghans were busy fighting each other. But the countries that the Lion River flows through are never at peace for long. Upriver, to the north of Sind, the Sikh Empire of the Punjab towered over the Indus like a thundercloud.

To the Mirs of Sind, and to the British, Ranjit Singh seemed
to be aiming at the annexation of Sind. He had demanded tribute from the Mirs, captured a fort near Sukkur, well within Sindhi territory, and was gathering his forces for what might well be an invasion. This would not suit the British from any point of view and the Governor-General epitomized the combination of greed and goodwill that resulted in imperial expansion when he informed the Talpur Mirs of his sincere desire that ‘the extension of British influence in the direction of the Indus, should be effected by the pursuit of commercial and peaceful objects alone. In interposing for the protection of Sinde from immediate danger, the British Government may justly expect to receive, in return, some corresponding advantages.’ These advantages, it transpired, included the permanent quartering of British troops at Hyderabad at the expense of the Mirs.

Caught between the Sikhs and the British the Mirs seem to have considered the British slightly less intolerable. In 1838 the British promised to mediate between them and Ranjit Singh. Perhaps the Mirs might obtain something for themselves after all. They were over-optimistic. The Russians were now advancing towards India’s western border, Afghanistan was vitally important to the East India Company’s boundaries and the supposedly friendly Shah Shuja was to be reinstated in Kabul. Sind was an important piece in the Great Game since the southerly and easiest passes into Afghanistan were reached through the Mirs’ territory. Pottinger was told to inform them that ‘a crisis has arrived at which it is essentially requisite for the security of British India, that the real friends of that Power should unequivocally manifest their attachment to its interests’. If the Mirs would cooperate, and allow military stores to be carried on the Indus in despite of the earlier treaty, the British would guarantee their independence from Afghanistan. If not, they would be left to the mercy of Shah Shuja. Since Sind had in effect been free of the Afghans for some time the Mirs saw little to their advantage in this proposal but they had no choice in the matter. The ‘Army of the Indus’ assembled at Ferozepur and began to march west into Sind. Ahead of it Alexander Burnes was dispatched to persuade the Mirs to allow the army passage; because they wanted to get the troops out of their territory they agreed to allow the British to occupy the island of Bakhar, in the middle of the Indus between Rohri and Sukkur, and the army crossed the bridges of boats between this island and the two banks of the river and headed for the Bolan Pass and Quetta.
The long-drawn-out blunders of the First Afghan War did not distract the British from their advances in Sind. At first these were inspired mainly by the hope of opening the river for increasing trade. The confederacy of the Mirs was dissolved; the British stationed forces at Thatta and Karachi at the Mirs' expense and supervised their foreign policy. By 1841, as a British historian says,

the unfortunate amirs found themselves . . . saddled with a general liability to help the British forces; parts of their territory had been taken from them, obviously for ever; they had to contribute in varying proportions a large amount of money . . . in order to maintain troops in their midst whom they did not want; and their independent position was gone for ever, because they had now come definitely within the sphere of British influence.17

Almost as irritating to the Mirs as the major concessions they had been forced to make was the requirement that they should provide fuel to the British steamers on the Indus, for this meant the eventual destruction of their much-valued hunting preserves.

On the British side a few voices were raised in protest at the advances into Sind. In 1842 the Governor-General wrote: 'The more recent reports as to the river Indus and our improved acquaintance with the population on its banks, and the countries with which it communicates, certainly lead to the conclusion that the hopes originally entertained of extending our commerce were to a great degree exaggerated.'18 Governing and protecting the new outposts in Karachi and Sukkur, and on the road to the Bolan Pass, would certainly be expensive. Even one of the directors of the East India Company was strongly opposed to the annexation of Sind, because it was unjust. Moreover, he thought, the Indus was simply not worth the expenditure of men and money that would be required to hold and police it: 'It has always appeared to me that the advantages of opening this river have been magnified beyond all rational bounds, even with reference to commercial views, for navigation is difficult, the country through which it flows has little of value to export, and the rude tribes which occupy it are too poor and lawless to become large consumers of our produce and manufactures.'19 But these were unfashionable opinions; the current of expansion had set in too strongly to be stopped. For their part the Mirs, resentful of the new arrangements, and cheered by the news of British setbacks in Afghanistan, began to collect their soldiers.
The whole province was in a state of unrest when Major-General Sir Charles Napier arrived in Sind to command part of the support operations for the British Army's return to Kabul in the second phase of the Afghan War.

In 1798, at the age of sixteen, Napier had fought against the Irish when they rebelled. He had fought against Napoleon in Spain and was wounded in the battle at Corunna when Moore was killed; for the rest of his life his wound pained him badly. He had fought the Americans at Chesapeake Bay. He was now sixty and for more than twenty years had been forced to live peaceably. The story of his relations with the Mirs of Sind is both confused and obscure; the one thing that seems clear is that both sides, for different reasons, were spoiling for a fight. In a small brilliant action Napier pursued a large band of insurgents through the desert, with only 350 men on camels, 200 horsemen and two howitzers, and destroyed their fortress. Outram, Napier's subordinate and political adviser, thought that this drove the Mirs 'to the measures of self-defence which were afterwards assumed as a ground for aggression'. Napier's reaction to the Mirs was uncompromisingly hostile; they were 'tyrannical, drunken, debauched, cheating, intriguing, contemptible' and although he condemned 'the way we entered in this country (just as honest, however, as that by which the Talpoors got it from the Kalloras) I would equally condemn any policy that allowed these rascals to go on plundering the country to supply their debaucheries after we had raised the hopes of every respectable man in the country'. They had relished the news of the defeat of the British Army at Kabul and 'that they hoped to have a second Cabool affair is as clear to me as the sun now shining'. They would not have it, if Napier had any say in the matter. Outram was sent round Sind to try to obtain the various Mirs' agreement to further subjections, which he did very unwillingly, since he himself continued to believe in their good faith. Napier gave the Mirs no time to show their intentions, one way or the other. In Hyderabad Outram was suddenly instructed to make no pledges; Napier was marching on the town. Before he arrived the people of Hyderabad attacked Outram's Residency - one of the ironies of history, since, of all the British, Outram sympathized most with them - and he was forced to rejoin Napier by river-steamer.

The final battle for Sind took place in February 1843 at Miani, near Hyderabad. The Mirs had gathered an army of
20,000; Napier had only 2,800 men and twelve guns. The Sindhis and Baluchis stood on the far bank of a dried river bed and Napier’s small force, charging them,

staggered back in amazement at the forest of swords waving in their front! Thick as standing corn, and gorgeous as a field of flowers, stood the Beločhs in their many-coloured garments and turbans... Guarding their heads with their large dark shields, they shook their sharp swords, beaming in the sun, their shouts rolled like a peal of thunder, as with frantic gestures they rushed forwards... with demoniac strength and ferocity... such a fight ensued as had seldom been known or told of in the records of war. For ever those wild warriors came close up, sword and shield in advance, striving in all the fierceness of their valour to break into the opposing ranks; no fire of small arms, no push of bayonets, no sweeping discharge of grape from the guns, which were planted in one mass on the right, could drive the gallant fellows back; they gave their breasts to the shot, they leaped upon the guns and were blown away by twenties at a time, their dead went down the steep slope by hundreds; but the gaps in their masses were continually filled up from the rear, the survivors of the front rank still pressed forward, with unabated fury, and the bayonet and the sword clashed in full and frequent conflict.22

Five thousand of the Mirs’ troops were killed, and 256 British; six of the Mirs surrendered and Hyderabad was occupied by the British. Their position was not at all secure, however, since much of the rest of Sind was still in arms and it was not until June that the whole province was conquered and peace imposed upon it. The remaining Talpurs (like Dost Muhammed) were exiled to India. ‘The whole transaction,’ writes a British historian, ‘has been thought to bear a colour of injustice which may rightly be ascribed to some of its parts, and the plea of the happiness of the people, who gained enormously by the change, has not been held sufficient to justify what happened.’23 Sind was annexed by the Company in 1843, the Punjab six years later. This was the highwater mark, but the Company itself was to disappear only fifteen years after it had acquired Sind.

As in the Punjab the British at once began to plan a programme of public works. Since the country was mostly new to them the first thing that was needed was a survey. One of the young men assigned to this task was Richard Burton, later to become famous for his journey to Mecca and his explorations in Africa. He arrived in India in 1842, an ensign in the Company’s army, and to his great disappointment learnt that the Afghan
War was over. With his almost incredible gift for languages (he eventually achieved a total of thirty-five languages and dialects) he soon learnt ‘Hindostani’, ‘Sindee’, ‘Guzerattee’, ‘Maharattee’ and Persian and for his pains was given the job of interpreter at ‘courts martial of dreary length’. The Sind survey was more to his taste. He grew his hair and beard long, stained his skin ‘with a thin coat of henna’, and then, posing as a seller of linen and cotton, half-Arab and half-Persian (to explain his faulty accent in Sindhi), wandered all over the country studying the terrain and the customs of the people. He was able to enter private houses to show his stock, and was evidently a social success for several fathers proposed that he should marry their daughters, and he said complacently later that he thought he had won a few hearts. In the evenings he talked with the students in a mosque or played chess or joined a group of opium-eaters. He seems to have thoroughly enjoyed himself but Sind itself, with its endless barren sands, its fierce climate and general poverty, he described as ‘the Unhappy Valley’.

Since Burton’s journeys in Sind so much has happened that he would hardly recognize the country today. Napier, appointed as commissioner as soon as the province was taken, at once directed his great energies to peaceful ends. The small fishing village of Karachi could, he saw, be made into a great port. He ordered the construction of a mole and set up an Irrigation Department to arrange water for the expanding town. Canals and roads were needed everywhere and using the simplest methods the engineers set to. ‘On a still day a fire would be lighted at the point to be reached, and the road or canal would be aimed directly at the smoke.’ Napier’s successor, Bartle Frere, one of the great British administrators in India, followed the same policy of opening doors between Sind and the outside world. As early as 1855 he was planning a connection from Karachi to Lahore by railway and steamboat. In the western regions of Sind another Englishman, John Jacob, gradually calmed the frontier tribes, drove roads and canals through the desert and planted trees and a vegetable garden at his residence to show what could be done. The end-results were not always appreciated when presented to the local chieftains: cabbages made poor salads, they thought, and turnips were not fruit at all.

Napier had done his best to stamp out drunkenness, duelling and debt among the officers of the Indian Army. He had put down minor insurrections without mercy. But he understood soldiers
and he knew that the army was not at ease. The sepoys, he wrote, 'is devoted to us as yet, but we take no pains to preserve his attachment. It is no concern of mine, I shall be dead before what I foresee will take place, but it will take place.' Napier died in 1853 and the Mutiny broke out four years later.

Largely because of his own work, and Frere's and Jacob's, Sind, like the Punjab, stood generally behind the British; the few mutinies in the Bengal army regiments stationed in Sind were put down firmly and Frere and Jacob, like Edwardes and Lawrence to their north, felt confident enough to send most of their troops to Delhi and the other main centres of the rebellion.

As soon as the Mutiny was over, and in Sind it was never felt at all closely, the construction of roads, canals and railways was resumed. In 1859 the first section of the railway from Karachi to Hyderabad was opened. All the materials had to be carried by camels or bullock carts; at first the engineers simply filled in the many stream beds and laid the line across them. The rains, infrequent but savage, carried away the underpiping. Proper bridges had to be built, and this took time. Section by section the railway pushed north to Lahore. Until 1889, when a permanent bridge was built over the Indus at Sukkur, travellers from Karachi, coming up to the west bank of the river by train, had to be ferried over to take another train on the east bank. While the railway was being built steamships of the Indus flotilla stood by to fill the gaps.

Roads, railways and steamboats were all very well, but what Sind needed more than anything else was water. Over the years its small canals were improved and more were dug. Between the Punjab and Sind the Indus, as a source of irrigation that must be shared, was often a subject of contention. For the Sindhis the great Sukkur barrage with its attendant canals was of more practical use than anything that any ruler had done for them before. The area under irrigation increased by nearly forty per cent; within eight years it was possible to grow three times as much cotton and five times as much wheat. There are still vast spaces of sand, but Sind is no longer an 'Unhappy Valley'.

At Partition Sind suffered less than the provinces that were divided, such as Kashmir and the Punjab. Just over seventy per cent of the people were Moslems but Hindus and Sikhs held many important positions, in industry and banking and in the professions. Karachi, taken by itself, actually had a slight majority of Hindus in 1941. There was little animosity between
the religious groups until Moslem refugees began to stream in from India; after a clash in Karachi in January 1948, however, most of the Hindus left the province for India. For some years, before the decision to build a new city in the north near Rawalpindi, Karachi acted as the capital of West Pakistan.

To drive from Karachi to Hyderabad is to see a study in contrasts. At first the soil is sandy, buff-coloured, sometimes white with salts. Only low, thorny shrubs grow here, tussocks of coarse grass, some stunted sheesham trees and a few bananas; nothing tall. Here and there water from the previous floods has been trapped in a shallow depression or an old river bed. Suddenly the colour of the soil changes to a deep red. Near the Indus the road passes two sizeable lakes, startlingly blue against their red banks. Lorries, decorated with bright paintings of landscapes and flowers, covered with flags and tinsel, hurtle past tiny donkeys bearing loaded panniers or pulling carts. The Sindhis are generally shorter and slighter than the Punjabis; against their long white shirts and loose trousers their skins look as brown as mahogany. In the villages the markets extend along the roadsides, brilliant with piles of fruit and crates of synthetic orange juice and redolent with curry and spices. Under the road-and-rail bridge between Kotri and Hyderabad, about 400 yards long, the Indus runs grey and thick like porridge, its sides sloping far above the water in winter and thickly planted with melons; the Spanish word for watermelon, sandia, derives from 'Sind' and was introduced to Spain by the Arabs during the years when their empire stretched from the Indus to the Atlantic. Hedges of reeds surround the melon patches and the growers live in small mud-and-reed huts on their allotments. By the time the river rises the melons are harvested and the reed hedges and huts are abandoned; they will be swept away in the summer floods and new ones will be built in the autumn.

Hyderabad is a mixture of unpaved lanes and new streets, mudbrick huts and new white concrete buildings. The great fort still dominates it. Round towers interrupt its high grey walls at intervals and the turquoise blue dome of a mosque rises from the centre. Nearly all the houses have windscoops on their roofs, opensided structures of mud and concrete which face the prevailing wind and direct air down into the rooms below.

East of Hyderabad the country is green and fertile. Tree-shaded canals run straight as rulers, not grey like the river they come from but as blue as the sky. Wheat, cotton, tobacco and a
wide variety of fruit and vegetables are grown here. Parrots dart through the orchards, kingfishers flash along the canals, white egrets perch on the black water-buffaloes.

To the south the desert begins again. The contrasts are over. The great grey river, Mitho Darya, the Freshwater Sea of pre-history, runs through wide sandy plains to a distant greenness of tamarisk. The skies are enormous. So much sheer space, so much parched land exposed under the pitiless sun, such endlessly monotonous horizons, lie heavy on the spirit. But every now and then, if the wind is in the south, the tired and dusty traveller smells a different, damper, saltier air. The sea is not far away now.
When Alexander’s army and fleet reached southern Sind in the summer of 325 BC they found that ‘the Indus divides into two mighty streams, both of which retain the name of Indus till they reach the sea’. At the dividing point Alexander ordered the construction of dockyards and a fortress; while this was going forward he himself set off to explore the two branches of the river, taking the westerly first and using his fastest and lightest boats. By now the river was in flood and running south at speed. The south-west monsoon was blowing. On the second day ‘the wind being against the tide raised a steep hollow sea which gave the vessels a thorough shaking; most of them were badly strained, and some . . . had their timbers started. However, they managed to run them ashore before they actually fell to pieces.’ Other ships were built and Alexander press-ganged local pilots into his service. It was as well that he did; for only local knowledge saved the fleet a few miles further down the river when they met a strong head-wind which set up such a swell that the rowers could hardly lift their oars above the tops of the waves. Following their pilots’ instructions they edged into shelter in a small creek. Here, for the first time, the sailors from the Mediterranean saw tides in operation. They had reached the creek at high tide; to their surprise the water began to disappear and the boats were soon left high and dry. They were even more astonished when the water returned and refloated the boats. Some had grounded on mud and taken no harm, but others, caught on a rocky patch, were badly damaged.

Repairs began at once. There would be no shortage of timber for, unlike most of the regions the Indus passes through, the delta is thickly forested; a type of acacia flourishes here and the strange banyan that drops roots from its branches, mangroves and all sizes of tamarisk from shrubs to tall trees. While the shipwrights got busy Alexander, scouting ahead as usual, put out to the open sea. 'There on the ocean he slaughtered bulls as
a sacrifice to Poseidon and flung their bodies overboard, and poured a libation from a golden cup, and flung the cup, too, and golden bowls into the water for a thanks offering, and prayed that Poseidon might grant safe conduct to the fleet. He then went back up the Indus to the place where it divided and started down the eastern branch. This proved to be easier than the other; he built a harbour and dockyards there, dug wells, and began to lay in stores for the return to Greece.

Although accounts of Alexander's activities in the delta of the Indus give a fair amount of topographical detail it is not easy to identify particular places today. None of the Greek buildings has been found. Earthquakes have changed the lie of the land, the sea has been driven back, the Indus itself now flows in different channels. Even the towns that figured in the Arab invasion a thousand years after Alexander's passage cannot all be pinpointed. 'Debal', the first conquest of Muhammad Bin Kasim in the delta, is still a mystery.

It may have been at Banbhore, a site near the mouth of an old channel of the Indus, now well inland. Recent excavations have shown that there was a large town here at the beginning of the Christian era, possibly earlier, and its 1,400 years of history can be divided into three distinct phases. Investigations of the lower levels of the ruins is difficult since they are waterlogged (as at Mohenjodaro), but archaeologists have managed to bring to the surface bits of pottery of a Greek type similar to pieces found at Taxila in a mound known to be of the first century BC. It now seems that the Sakas and Parthians, who were not previously known to have reached so far south, had some connections with the delta. 'And who knows,' writes the Pakistani archaeologist responsible for the work, 'that below these levels under the subsoil water, Alexander's Harbour itself may not be lying hidden?' After the Hellenistic period Hindus and Buddhists controlled Banbhore for hundreds of years. By the eighth century AD, as shown by datable evidence at the ruins, the Arabs had made a port there for themselves.

Fortified walls surrounded the inner city, which contained a Grand Mosque, some large public buildings and extensive residential areas. The richer houses, each planted round a central courtyard, were made of stone and plastered with lime; probably the materials had been brought down the Indus from the limestone hills near Sukkur. The poorer houses were built of mud bricks on foundations of stone. Wooden beams were used in the
roofs. Outside the southern walls of the city, now half-submerged by a creek, are the remains of what seems to have been a long quay, founded in stone and furnished with objects that might have been bollards. This is where ships entering the Indus would have tied up to discharge their cargoes. Pottery and coins found in the ruins demonstrate trade links between Banbhore and the Moslem countries to the west and to countries as far east as China. The town was evidently prosperous and busy and comfortable.

In the thirteenth century it suddenly died. A large number of skeletons have been found in the ruins, some with iron arrowheads embedded in their bones. Many of the houses are floored with ashes and charcoal and their bricks have been burnt red-hot. It seems that the city was first stormed and then set on fire. Jalaluddin, the Afghan prince who was later to win a shortlived victory over Genghis Khan’s Mongols and escape from them across the Indus, is known to have sacked Debal in the thirteenth century. Identification of the Banbhore ruins with Debal is not yet proved but ‘from the progress made so far, it can be stated with absolute certainty now that the site is of the same Arab period and represents the remains of a city, if not Debal itself, in no way less important or less extensive’.4

Ibn Battuta found other ruins to the west of Banbhore which might also claim to be the remains of Debal. He saw ‘an innumerable number of stones in the shape of men and animals’, mostly broken and disfigured, and was told ‘that in this place there was a great city whose inhabitants were so depraved that they were turned to stone’. The port where Ibn Battuta’s voyage down the Indus ended was Lahari, or Larrybunder, ‘a fine town on the coast where the river of Sind discharges itself into the ocean’.5 This place at least is known and it is much further west than the present outlets of the Indus.

To go to the delta is to understand how whole towns can get lost there. Over an area of 3,000 square miles, as flat as a lawn, the Indus wanders at will. By the time the British made their first chart, in 1783, Alexander’s two ‘mighty streams’ had divided themselves into a dozen small channels open to the south-west monsoon and the whole place had become a welter of tamarisks, water and drifting sand. For the delta is a battleground, where the river and wind and sea endlessly contend, and occasional earthquakes upset what natural stability can be temporarily achieved. Driving big seas before it the summer
monsoon renders the whole coastal belt uninhabitable for miles inland and months on end. But the Indus conquers the coastal sea as it has so often conquered the mountains in its upper reaches. Carrying a million tons of silt daily it has steadily forced the coastline outwards. In Alexander's time the shore was probably fifty or eighty miles inside its present line. Every landmark changes each year, and across the whole country blows the fine and covering sand.

Neither the Indus nor the sands have swallowed Thatta, one of the old towns of the delta, whose history goes back at least 600 years and probably much further. It was a centre of Moslem power and learning from the fourteenth to the eighteenth century. In 1555 a Portuguese fleet of twenty-eight large pinnaces sailed to the mouth of the Indus in accordance with an undertaking to assist the rulers of Sind against their local enemies. Surprisingly, the Indus people reached agreement among themselves, and the Portuguese were left with no employment and no pay. In fury and frustration they raged across the delta country for over a week, killing thousands of people and looting every temple and house of its treasures. Thatta itself was sacked. But it was soon rebuilt. Akbar assumed sovereignty over Sind, and at the end of the seventeenth century, in spite of the effects of a special form of plague or fever that appears to have recurred at intervals, Thatta was a large city. The Persian king Nadir Shah took the place in 1742; there were then 40,000 weavers, 20,000 other artisans and 60,000 tradesmen. A contemporary European visitor noted that a vast quantity of the 'linnen calicuts' made in Multan was transported down the Indus to Thatta 'where the merchants of several countries bought them up'. But he also noted that the river channel had recently been 'spoiled' and its mouth is 'quite stopped up with sands'.

Less than a hundred years later Burnes estimated the total population of Thatta at only 10,000. Its decay was probably, in the first instance, the result of changes in the river channels above and below the town. Burnes blamed the Kalhoras and Talpurs, who had done little to promote their people's prosperity, and even more its plagues. 'Since 1831,' he wrote, 'the cholera has desolated Tatta, but it is deemed throughout Sinde one of the lowest and most unhealthy sites; the wells and water are generally fetid; there is also much stagnant water; and even in the winter the mists of the morning are disagreeable.' The Indus then ran at some distance from Thatta but Burnes thought
there was a possibility that it might return to the town. It has not done so.

Today the river is some six miles to the east and Thatta is little more than a large and dilapidated village. Above it stretches a ridge covered in the ruined tombs of Moslem rulers. Broken stone walls encompass the remains of large and imposing domes and cupolas, still ornamented here and there with tiles and paint. Some of the tombs were built in advance; if a craftsman made a specially delicate lattice-work of stone or an unusual design in tiles his master rewarded him by cutting off his hands so that he could never make anything so fine for another prince’s tomb. The Mogul Emperor Shah Jahan began to build a large mosque in Thatta itself in 1647; his son Aurangzeb continued the work and expanded it to include nearly one hundred burial chambers for his many relatives. Conventionally domed and arched, mostly in brick, sand-coloured or white-painted, and still apparently unfinished, its main beauty is its tiles. Against a white background stylized flowers and patterns of intersecting circles and geometrical shapes, brilliantly sharp in dark blue, light blue and sea-green, and relieved here and there by touches of ochre, echo the colours of the delta country.

The first British chart of this country was accurate only in part and in the short term. Older charts no doubt existed, for it was known that sailors had worked regularly into the Indus area from Arabia and Africa, and there must have been local pilots to guide the trading ships in. But there was no clear picture of the delta. When the British established themselves in Cutch and became neighbours of Sind, they resolved to investigate this country more closely. The reports they received were not encouraging. In 1799 Nathan Crow was ashore at Karachi with instructions to travel east and take a good look at the Indus. ‘The river,’ he reported, ‘has few merits except its periodical swell; its stream is foul and muddy, and so full of shoals and shifting sands that flat-bottomed boats only are safe ... its course is extremely crooked and towards the sea very inconstant.’ Other explorers brought the same sort of tidings. Pottinger, on his mission to the Talpur Mirs at Hyderabad in 1809, observed that many branches left the Indus and apparently petered out.

Burnes and Wood, entering the river in the winter of 1836 at the beginning of their survey of its potential as a carrier of expanding trade, must have been rather dashed to see ‘a square-rigged vessel, which had been imbedded in the Delta of the
Indus, and left, by the caprice of the river, on dry land, about twenty miles from the sea' sometime within the previous hun-
dred years. She was about seventy feet long with a beam of twenty-eight feet, apparently a Portuguese brig carrying fourteen guns; out of the deck of this 'half-fossilized ship' grew a large tamarisk tree. The river shifted its channels, Burnes was forced to admit, but with the optimism that he continued to demonstrate all the way up to Kalabagh (and on to Kabul) he thought 'there is ample depth in its estuaries to give encourage-
ment to the merchant to seek, by this line, with properly constructed vessels, a new channel for the exports of our coun-
try'.

Wood, the sailor, was less sanguine. 'It has been a matter of regret that so noble a river as the Indus should have no port accessible to vessels of burden,' he wrote. Shallow-draught boats might indeed communicate between the sea and the regions above the delta, but the only safe sea port for ships of any size trading into the Indus valley was Karachi. Wood had seen an 1834 prospectus for a steam company on the Indus, which sug-
gested that an old East Indiaman might be stationed in the mouth of the river as a depot; if she were to be laden, he wrote irritably, she would not even be able to sight the coast, much less cross the bar. Even within, and upstream of, the delta, in its shifting passages and currents, the sailor could not feel safe. One particular danger 'which no attention can effectually guard against' was floating, half-sunk trees. This might be eliminated if the Mirs of Sind could be persuaded to cut their hunting forests so as to leave bare swathes along the banks. Given their passion for hunting it can be assumed that the Mirs would have taken no more kindly to this suggestion than the later British demand to use their trees for fuelling paddle steamers.

Wood's Appendix to Burnes's ebullient report is as care-
fully worded as a diplomat's dispatch: 'The navigation of the Delta is certainly intricate; but the difficulties are not . . . in-
surmountable . . . nor does the river improve so much above it as I was at the time given to understand.' He was probably trying to get his adverse opinion across to the authorities in India and London without offending his mission leader.

To Burnes, always appreciative of new places, the delta was fascinating. 'The larks sang as clearly and loudly as in Europe; and their notes, with the slow hollow sounds of the bells hanging from the necks of the buffaloes, as we wandered among the tamarisk shrubs, were soothing to our ear.' Even near the
river the cane had to be irrigated from wells operated by two sets of Persian wheels, one above the other, a camel on one and two bullocks on the other, all three animals blinded. Burnes's boatmen made a great drama of navigating 'their mighty river . . . In any part of it where it is necessary to give the boat an extra pull, the . . . master calls out 'Bravo my heroes!' and there is as much zeal and industry displayed as if an enemy instead of a river were to be opposed.'15 North of Thatta the party went off to see a new method of fishing on one of the lakes that in the flood season was connected with the river but now, in winter, lay three miles away from it.

We embarked in skiffs on the lake, a large and beautiful expanse of water . . . Nets were stretched across the lake at a point where it was about 600 yards wide, and four circular receiving nets were fixed at intervals along the line in such a manner as that the fish, their progress being stopped by the long nets, might be tempted to leap into the circular ones. The fishermen conducted us to the end of the lagoon, where they commenced beating the water, jumping in their boats, striking their cooking utensils, shouting and yelling, and making all sorts of imaginable noises; at the same time they gradually advanced. The fish, frightened, fled before them, and, finding no other exit, leaped into the circular nets, and became an easy prey to their pursuers. Upwards of a hundred were caught, and the fishermen seemed to enjoy the sport as much as ourselves.16

Like Pottinger, Burnes found the people handsome and attractive; they boasted to him of one of their women whose beauty had so attracted a local prince that she had been able to gain special privileges for her tribe, which they still enjoyed.

Burnes sailed on upstream to Hyderabad, enjoying himself, meeting old friends from his earlier trip, observing people and porpoises and pelicans with equal interest. Once he nearly shot a tame otter that was fishing for its supper: 'The owner of this animal presented it to us, and it became as domesticated as a dog,'17 but higher up the Indus they could not find enough fish for it and it became bad-tempered and had to be got rid of. One evening, on a different boat, Wood found that his crew had captured two of a family of otters. All night their relatives followed the boat and 'serenaded us with piercing shrieks,'18 which became even louder when the captives responded. Two days later and ten miles upstream his boat was actually boarded by otters in the middle of the night. Could they have been members of the bereaved family?
In 1837 (the year after Burnes and Wood went up the river) a naval survey mission directed its attention to the mouth of the Indus. The river, reported Lieutenant Carless, which had until recently debouched through eleven large mouths, had only three of any size now, though there were a number of small streams, mostly choked with shoals and tamarisk. Each channel had its own name; one was called Pópet (parrot, in Sindi) because, on entering it, the boatmen would sacrifice a parrot to a celebrated local saint. The tides were extremely irregular. Where there were many small streams the direction of the tide changed almost every hour but the current was local and scarcely felt only two miles away; on the larger streams there was a tidal rise and fall of as much as ten feet. Burnes’s ‘half-fossilized ship’ had been about 200 tons; Carless now saw another of at least 400 tons grounded more than a hundred yards from the channel. Porpoises, otters and turtles abounded and there was a great variety of waterfowl, which included duck, geese, pelicans, flamingoes, spoonbills, storks and cranes. Reptiles that he describes as enormous alligators swam in the delta channels, at least twenty-five feet from the tip of their long pointed snouts to their tails. They were said to be sluggish here, rarely attacking a man, and indeed Carless saw many fishermen floating past them on their earthenware pots, but higher up the river they were smaller and more vicious. It was a country of small villages, dried-up channels, pools and lakes. At high tide the whole delta was submerged for three or four miles inland and for two miles beyond that the ground was swampy; this made good pasturage for the buffaloes who liked their rushes soaked in salt. As to navigation, it could be done only by eye and by soundings; the channels changed frequently; great masses of earth broke off the banks to form shoals making a noise that Wood had thought ‘might be mistaken for the continued discharge of artillery’; and the local pilots were always out of date and practically useless. Country boats could still enter the river in winter but in February westerly gales nearly always set up heavy seas and by the middle of March ‘the Indus may be considered closed for the season’. A few adventurous sailors would continue to use it until the end of April but the southwest monsoon was by then in full force and the entrance was very dangerous. Many boats were wrecked.

The constantly reiterated warnings of nineteenth-century British naval officers against the entrance to the Indus are certainly valid to this day. But long ago, it seems, the river was
kinder to deep sea sailors. The men of the Indus valley civiliza-
tion, according to evidence, regularly sailed in and out of its estuaries. Scylax and Nearchus certainly found a passage down to the sea. The Arabs traded into the river. The delta was never easy. But at some point in the eighteenth century, and possibly as a result of an earthquake, the whole coast seems to have been altered and the mouths of the Indus rendered practically un navigable.

Boats still work within the delta, of course. A near relation of the dundi sails or punts along the shallow brown channels, here flowing with water as thick as at Hyderabad but reddish-brown rather than grey. Families, even whole villages, live out their lives on the river, fishing and carrying up and down stream whatever cargoes are obtainable. The dundi had a raised platform near the short mast to accommodate the women and children while the men trim the square sail or push the quants and work the great triangular rudder. Smaller boats like gondolas, with long ends clear of the water, carry kite-shaped sails and are fitted with high narrow rudders. Others, lateen rigged, look like two slanted slices of melon as they run upstream, borne by the monsoon over the river’s current.

The Indus meanders south through its maze of channels and the tamarisks begin to thin out. Finally they disappear alto-
together. In turn, the mangrove, the scrub and the saltwater rushes give up the battle against sea and wind. Then there is nothing but sand-dunes and, beyond the last of them, the great grey breakers.
From the Red Sea to the coast, east of the Indus delta, the British Admiralty Pilot warns sailors that a 'peculiar luminosity' may occur at night. The horizon becomes suddenly very clear, a white bank seems to rush at the ship, and the whole sea becomes a pure and brilliant white. This can happen out at sea or near land, in calm or stormy weather, and, as the Pilot says, with its usual dry accuracy, 'may cause alarm to a stranger unacquainted with it by giving him the impression that his vessel is amongst breakers'.

Captain Bradley of the British merchant ship Ariosto, who had seen this 'white water' many times, had an even more unnerving experience nineteen miles off the delta of the Indus. In February 1912, on a clear calm night, his ship suddenly steamed into what he described as 'the most curious and weird atmospheric phenomenon it has been my lot to see in all my forty years' experience of a sea life'. From a distance the 'phenomenon' looked like waves breaking on a low beach but once the ship was in the middle of it flashes of light came at her, gradually lengthening in shape and veering in direction.

All the time this was going on, the surface of the sea appeared to be violently agitated, at times very high seas, as if they would completely engulf the ship, the imagined waves always going in the same direction as the waves of light... the sea appeared like a boiling pot, giving one a most curious feeling – the ship being perfectly still, and expecting her to lurch and roll every instant. It turned me dizzy watching the moving flashes of light, so that I had to close my eyes from time to time.

After twenty minutes the Ariosto got clear, but soon went through the same experience again, this time slightly worse. 'When the flashes of light passed over, the sea appeared just for the instant of time to be full of jellyfish, but I do not think there were any about.' Two similar phenomena have since been reported by British naval vessels; both took place within the
Arctic Circle, which is a long way away from the mouth of the Indus and the *Pilot* makes no attempt to explain any of them.

Even without such curious manifestations the approach to the Indus from the sea is alarming. The hundred-fathom line is sixty miles off-shore, the bottom of the sea shelves up slowly, and sandbanks front a coast on which the breaking waves are often seen before the land itself. The vast quantity of silt that the river deposits in the sea annually builds up a continually changing silhouette. Between 1873 and 1904 nearly a hundred square miles of land grew outwards from the delta and in the next fifty years the coastline had advanced seawards as much as five miles in places. It is low, visible in good weather only from two miles offshore, for it is featureless: there are no trees or shrubs, nothing but swamp, often partly submerged; on hot, dry days, with an offshore wind, it is blanketed with a haze of dust. What was the main channel of the Indus last year is probably now choked and a new entrance must be found. In all these circumstances, as today's *Pilot* says flatly, echoing the early-nineteenth-century British sailors, 'it is dangerous for a vessel of deep draught to approach the Indus delta'.

The local boats face another danger, as acute as any of the navigational hazards; the teredo worm, which here can penetrate a half-inch teak plank within six weeks. Every ten days the coastal fishermen must drag their boats ashore to paint their bottoms with fish oil as a preservative. In Carless's time a hundred fishing boats, each of ten to fifteen tons, worked along the coast. They were beamy and sharp-ended, some open except for a high poop, others decked over. Their bows were carved, and embellished with patterns of beads and shells to please the sea-gods and ensure successful fishing. Under a single lateen-sail they could show a good turn of speed, and there were indeed fish: two sorts of cod, red snappers, sharks and many others. On a good day the shore markets could not absorb the catch and the fishermen, who believed that to throw dead fish overboard was to frighten other fish away, landed their superfluous catch on the beach. In places, wrote Carless, there were fish 'in every state of putrefaction', and 'an intolerable stench'.

A few fishing-boats still work out of the Indus, but the centre for sea fishing in Pakistan is now Karachi, moled and dredged and quayed as Napier saw it in his mind's eye, and a great deal safer than the shifting river delta. But in spite of their dangers the coast and delta of the Indus were braved by merchant vessels
for thousands of years before the harbour of Karachi was developed. There was commerce between the towns of the Indus valley civilization and Egypt and Mesopotamia in the third millennium before Christ, and some of it was probably carried by sea, by vessels that kept close to the coast along the way and beached or anchored at night. In the tenth century BC King Solomon is known to have built a navy on the Red Sea and manned it with Phoenicians who sailed to Ophir every three years to bring back gold. Ophir has not been identified with certainty but the length of the voyage indicates that it was in India and it may have been near the delta of the Indus. Masefield, imagining the great oared merchant ships on their return trip, wrote:

Quinquireme of Nineveh from distant Ophir
Rowing home to haven in sunny Palestine,
With a cargo of ivory,
And apes and peacocks,
Sandalwood, cedarwood, and sweet white wine.6

Apart from the ‘sweet white wine’, probably taken on board at a much later port, the cargo is altogether Indian.

Not trading but exploring, Scylax emerged at the river mouth in the sixth century BC after his long voyage from the Kabul River and set off for the Red Sea. Two hundred years later, while Alexander marched his retreating army back towards Greece along the inhospitable coast of Sind, Nearchus took out to sea the fleet that had been built on the Jhelum, added to and repaired at Multan and a dozen other resting points on the Indus, and pointed the bows of his ships to the west. By the first century BC the Greeks were voyaging regularly as far as the mouth of the Indus. When the Romans gained ascendancy in the Mediterranean they supported the Greek sailors with arms and money, and as many as 120 ships a year left the Red Sea for Africa and India. Without sextant or compass sailing was still a matter of coast-hopping and the Arabian Sea was rife with pirates, so the voyage to the west coast of India was not only long (three to four months) but extremely hazardous. All the same it was safer to carry goods by sea than to attempt to run the blockade of the Parthians, who then held the mountain passes on the overland route to India.

About AD 20 the sailors made a major advance; Hippalus, a Greek merchant trading into the Arabian Sea, had observed both the lie of the surrounding land and the seasonal set of the
winds. One summer, running before the south-western, he sailed across the open sea and reached the mouth of the Indus. It became known that ships could not only sail directly to India in the summer monsoon but back to the Arabian coast in winter with the north-east monsoon and for 200 years Roman ships, probably crewed for the most part by Greeks, traded into the Indus delta. Outward bound they would carry red coral and such products of Roman craftsmanship as glass, and porcelain cups and dishes, and glass beads, and above all quantities of gold coins, for gold has always been specially prized by Indians, and at this time their own sources were drying up. Many handsome Roman coins have been discovered in northern India, and her oriental trade was a serious drain on Rome's resources. On their return voyage the merchants took back to Italy such luxuries as ivory, perfumes, spices, dyes, fine muslin and semi-precious stones, and Chinese silk that had been carried across the Himalayas to Taxila and then probably down the Indus by boat, 'articles which flatter the vanity of women,' said Tiberius bitterly, '... little objects of luxury which drain away the riches of the Empire.'

As Roman power waned Arabian ships appeared in increasing numbers off the river, and pirates based on the gulfs and islands of Arabia did their best to prevent the vessels of other nations from reaching India from the west. The Greek and Roman ships had been solidly constructed, with planks joined by nails. The Arab boats, on the other hand, made of teak or coconut wood which had probably been imported from India, since no suitable wood is available in Arabia, were mostly sewn together with coconut fibre. This made for flexible hulls and easier groundings but gave less strength in heavy seas. After a number of his ships had been wrecked in the first Moslem raids on Debal the Caliph wrote sadly: 'The sea is a boundless expanse, whereon great ships look tiny specks; nought but the heavens above and waters beneath; when calm, the sailor's heart is broken; when tempestuous, his senses reel. Trust it little, fear it much. Man at sea is as an insect on a splinter, now engulfed, now scared to death.'

But after Muhammad Bin Kasim had firmly established Arab power in Sind, sea trade, hindered only by the fierce and uncontrollable pirates, was carried on from China to the Persian Gulf. For ships engaged on these long voyages (the round trip to Canton took about eighteen months) Debal was an important harbour for repairs and provisioning as well as barter. To this
day the great waste of ocean between the easternmost cape of Africa and the western coast of India is still 'the Arabian Sea'.

In its turn the Arabian Empire declined; by the middle of the sixteenth century the Portuguese caravels were off the Indus and the influx of the Europeans had begun. Ophir (if indeed it was here) and Debal and the other delta ports that once had sheltered and supplied the maritime traders carrying goods between east and west have been ruined, and even their ruins are lost under the sand. The Indus, the fount of their prosperity, destroyed them, with its floods and earthquakes and 'Alexandrian' changes of course as it has destroyed so many other ancient towns and settlements along its banks, and no ships sail into the Indus today; they home on Karachi.

Far out to sea, sometimes as far as ten miles, the greenish-blue Arabian Sea is discoloured by the reddish-grey Indus. Underwater, just beyond the coastal sandbars, a deep narrow canyon called the Swatch continues the line of the river outwards for some fifty miles to the edge of the continental shelf. On both sides of it the sea is shallow, less than a hundred feet deep at its head and deepening only gradually. The bed of the Swatch is 2,000 feet lower. It may have been caused by an earthquake, but there have been earthquakes in neighbouring regions and they have not produced a similar effect. The Swatch is unique on this coast. Perhaps the Indus, the river that has cut through the greatest mountains of the world, has carved a last gorge in the bed of the sea.
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**INDUS: FACTS AND FIGURES**

**Source.** At nearly 17,000 feet, in western Tibet, on the northern slopes of the Kailas Range, approximately $31^\circ 25' N$, $81^\circ 30' E$ (roughly the latitude of Shanghai and Cairo, and the longitude of eastern Ceylon).

**Mouth.** In Pakistan; the centre of the wide delta is about $24^\circ 00' N$, $67^\circ 30' E$, just above the Tropic of Cancer and some 40 miles sse of Karachi.

**Length.** 2,000 miles, depending on meanders.

**Countries Traversed.** Western Tibet, Indian Kashmir, Pakistan.

**Basin.** 364,700 square miles.

**Major Tributaries (from source).** Gartang (Left bank); Shyok (Right bank); Shigar (R); Gilgit (R); Astor (L); Kabul (R); Kurram (R); Panjnad (L) – i.e. Jhelum, Chenab, Ravi, Beas, Sutlej.

**Dams and Barrages (from the point where these become possible, i.e. south from the Indus’s break out of the Himalayas).**

(a) **Dam**

Tarbela – now under construction.

(b) **Barrages**

Jinnah – approximately 150 miles lower down, just below Kalabagh; completed 1947 (formerly called the Glancy Barrage).

Chasma – approximately 50 miles lower down, part of the Indus Basin project sponsored by the World Bank, etc. Completed 1970.

Taunsa – approximately 150 miles lower down, near Dera Ghazi Khan, first proposed 1936, finished 1958.

Gudu – approximately another 150 miles down, and some 50 miles below the junction of the Indus and the Panjnad; first proposed 1940, completed 1962.

Sukkur – approximately 120 miles down; first proposed 1847, pros and cons debated for years since this was the first barrage
(or weir) to be proposed on the Indus; finally approved 1923, completed 1932 (formerly called the Lloyd Barrage).

Ghulam Mohammad – approximately 250 miles down, near Hyderabad, at the head of the Indus delta; completed 1955.

**Volume of Water.** Above the Panjnad there is a seasonal variation of from 10,000 to one million cusecs. At its mouth, i.e. after the canals taken off above, summer discharges are still estimated at 30,000 cusecs.
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