

The Roof Of The World At A Glance

I'm not an outwardly religious person, but I've come to realise that each time I return to the abode of snows, it is as a pilgrim. Of course, this is nothing new. The local inhabitants and near neighbours to the Himalaya have produced countless pilgrims to the high places of the region since pretty much the dawn of mankind.

Although religions, most notably Buddhism in Tibet and Nepal, Hinduism in Nepal and India and Islam in Pakistan, are a prominent feature on the Roof of the World, the spiritualism of this place and its people transcend all religions. Insights can be profound.



Left, Buddhist images inside Samye Monastery, Tibet
Above, a mosque in Baltistan
Right, a Hindu shrine at Nagarkot, Nepal



The Dalai Lama's flight from the Chinese in 1959 swept the Tibetan Plateau on to the world stage. Adjoining the Himalaya to the north, here is a high altitude moonscape inhabited by another fascinating indigenous people who, until the 1950s, had defied the very notions of 'westernization' and 'modernization'. The change in terrain as you cross from the south side of the Himalayan mountains to the north side could not be more dramatic.

Fewer people know of the Karakoram, although many know of the ancient Silk Route that once tra-

The phrase 'Roof of the World' is usually used to refer to the high plateau of Tibet. I see it as encompassing a wider area. Fascinating mountain people, and the spectacular alpine areas they live in, are not exclusive to Tibet. The Himalaya and Karakoram are also home to a diverse yet, in a fundamental sense, cohesive set of cultural groups. Between these two colossal mountain chains are shared all of the world's tallest peaks.

Largely due to mountaineering, many people know of the Himalaya. Meaning 'Abode of Snows', this is truly a land of giants, being home to Chomolungma or, as westerners call it, Mount Everest. Soaring to 8,848 metres, this is the tallest mountain on earth. The Himalaya is also home to a very diverse group of endearing mountain people, including the famous Sherpas and, reputedly, the equally famous Yeti, or Abominable Snowman.

versed it. This astounding network of massive, young, fortress-like mountains and grinding glaciers is home to Chogori, the ice mountain. More widely known as K2, this is our planet's second tallest mountain at 8,611 metres.

The Karakoram adjoins the Himalaya on her north western flank and, like the inhabitants of the Himalaya and Tibetan Plateau, those in the Karakoram exude the same endearing alpine predisposition, whilst exhibiting their own set of captivating cultural and social characteristics. In the Karakoram Buddhism and Hinduism give way almost exclusively to Islam.

As a simple traveller, with no particular linguistic skills or mountaineering abilities, it became apparent to me that with a backpack, an open mind and some initiative, it is quite possible to explore the Roof of the world. A land so fascinating, so captivating, that it never ceases to inspire me. All three areas, the Tibetan Plateau, the Himalaya and the Karakoram, offer numerous challenges to the traveller, but none that are insurmountable with a little luck and good timing. Certainly the rewards outweigh the risks and discomforts many times over.

Geography - where and what

Running from east to west, the Himalaya, Karakoram and Hindu Kush constitute, by a large margin, the tallest chain of mountains on earth. This family of giants is punctuated by some of the world's greatest rivers and thousands of glaciers - there are 17,000 glaciers just in the Himalaya and many more in the Karakoram, some of which are the world's longest outside the Polar regions.

Deep valleys are carved through the mountains by glaciers propelled inexorably downwards by the immense weight of new snow and ice continually dumped at their sources, high amongst the peaks. On their descent, vast amounts of debris is cast aside, piling high to form moraines that litter the valley walls and floors.

Eventually, the debris is ground and crushed. Melting glacial ice carries it down as silt to the lowlands far to the south. This silt gives the mighty rivers of the Himalaya and Karakoram their distinctive cement gray and sometimes cloudy turquoise colouring.

The Himalaya extends eastward to the border between India and Myanmar (Burma). Here lies mystical Darjeeling in the West Bengal province of India. To the north of Darjeeling is Sikkim and on the border with Nepal is the mighty Kanchenjunga, the tallest mountain in the eastern Himalaya and third tallest in the world. Kanchenjunga and her five sisters comprise a striking mountain range all soaring above 7,000 metres in height.

The Himalaya's northern border runs roughly between Nepal and Tibet, westwards into Pakistan. Nanga Parbat stands proud and aloof here at 8,126 metres. The tallest mountain in the western Himalaya, Nanga Parbat is also the killer of more climbers than any other mountain on earth.

Below, a section of a satellite photograph, taken by NASA, of the Himalaya, around Mount Everest



At her feet the mighty Indus River, whose source is near the foot of sacred Mount Kailas, far to the south east on the Tibetan Plateau, surges southward towards the Arabian Sea. Beyond the Indus to the west, the Himalaya gives way to the Hindu Kush.

Running parallel to, but north of the Abode of Snows, and separated by the upper Indus River, is the Karakoram. This is a 500 km stretch of particularly unstable, serrated mountains that jut into the sky like the teeth of a gigantic, multi-bladed saw.



Left, an example of the often more gentle profiles of the mountains on the southern side of the Himalayan divide; contrasting, right, with the younger, more jagged profiles of Karakoram peaks

Bordered by China's Xinjiang province to the north, in the west at the Ishkoman valley, the Karakoram, like the Himalaya, gives way to the Hindu Kush. Here, rounded mountains and broad, treeless, grassy valleys of the Pamir stretch from western China's Xinjiang province over into the former Soviet Union's Tadjik Republic. The western end of the Himalaya marks the Karakoram's southern extremity.

Geology - How the Roof of the World came about

Strung across the roof of the world are our planet's tallest peaks, the top three being Mount Everest at 8,848 metres in the central Himalaya, K2 (or Mount Godwin Austen) at 8,611 metres in the Karakoram and the Kanchenjunga, whose highest peak is 8,598 metres, in the eastern Himalaya.

These huge mountains are all children of an immense geographic collision which began in slow motion some 130 million years ago, and saw its main impact 75 million years later. This collision continues even today. As a result some of the giants, like Nanga

Parbat, are still growing faster than the elements can wear them down. Nanga Parbat is growing at 7mm per year!

The collision is between two continental plates, the Indo-Australian plate, which is advancing

from the south at about 5cm per year, and the Eurasian plate. Since their initial impact 55 million years ago, the

Indo-Australian plate has forced its way under the Eurasian plate, pushing up gigantic amounts of buckled, folded and fractured rock, resulting in the birth of the Himalaya and Karakoram.

These colossal alpine ranges are the world's youngest as well as highest. This, coupled with the continual advance of the Indo-Australian plate, has created a dynamic and spectacular environment.

In geographic terms the region is unstable, particularly the Karakoram. Earthquakes, rockfalls, landslides, avalanches and floods are common. Extreme climatic variations and the annual buildup of the Monsoon to the south also play a part in relentlessly sculpturing the alpine environment. The result is a multitude of peaks exceeding 7000 metres, with 14 exceeding 8,000 metres.



To put this in context, the only other place on the planet where a mountain reaches 7,000 metres is in the Bolivian Andes, where Amco-huma reaches 7,010 metres!

The People

But sheer height and scale are only two of many spectacular features. To enter the Abode of Snows is to enter seemingly endless, sometimes frighteningly steep, often closely packed, deep valleys. Continually eroded by powerful glaciers and thundering rivers, these valleys are home to another outstanding feature, the people.

Just as the collision of the Eurasian and Indo-Australian plates has created one of our planet's most spectacular environments, so this alpine wonderland has helped to weave one of our world's most fascinating and appealing human cultural tapestries.

Although there are other important factors, such as religion, which have also shaped the diverse peoples inhabiting the Himalaya and Karakoram, there is one over-riding characteristic shared by them all - the mountain people are special, because they reflect the special environment which they inhabit.

Whether you meet a Moslem Balti in Skardu, a Tibetan Buddhist in Lhasa, a Hindu Gurung in the Annapurna Sanctuary, or a Buddhist Sherpa in the Solu Khumbu, you will find them almost universally uncomplicated, hardy, hospitable people.



In a relatively small area, the Roof of the World contains a surprising range of disparate groups. This is due, at least in part, to pockets of people being virtually isolated from one another over the centuries by the inaccessible terrain. Even today, much of the region is reachable only on foot or by yak. However, there are walking trails all over the region up to nearly 6,000 metres.

Another factor, which certainly contributes to the richness and diversity of the numerous cultural groups of the region, is the powerful mysticism invoked by the natural grandeur of this greatest of alpine areas. For centuries, pilgrims from all over Asia have been drawn to these mountains, with their sacred peaks, lakes and rivers. The mountains are still relatively unspoilt by the 'baggage' of civilization, offering a haven where purification of the soul and clarification of the mind are more readily attainable.

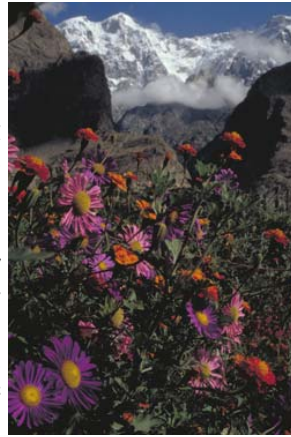
The origins of Hinduism are traced to the Indus Valley in the Karakoram. In the foothills of the Nepal Himalaya, in a small town called Lumbini, the Buddha was born. A little further south, in Bhodgaya, he attained enlightenment.

Flora and Fauna

The Roof of the world is home to a wide variety of flora and fauna, due largely to the huge range in altitude and climatic conditions that occur within the region.

On the south side of the Himalaya and Karakoram, below the tree line at 4,000 metres, the valley sides are covered by lush forests of rhododendron, fir, pine, Himalayan cedar, birch, juniper and evergreen oak in the drier areas. These forests are inhabited by many species of mammals, reptiles and birdlife. The Himalaya and Karakoram are home to nearly ten percent of all the world's bird species.

Along with cultivated crops such as barley, maize, potatoes and turnips, during the warmer months many varieties of alpine flowers also abound. Injecting brilliant colour into the otherwise stark landscape, they include edelweiss, wild roses, magnolias, orchids and sunflowers, to name just a few. Many varieties of herbs, such as thyme and alfalfa, also manage to exist in these high altitudes. They are used by the locals in cooking and traditional medicine. There are more than 6,000 species of flora in Nepal alone. Flora is generally most prolific in the south eastern Himalaya due to the higher rainfall and more moderate climate.



Above the tree line, over 5,000 metres in summer months, the terrain supports sparsely scattered wild flowers, such as Stellara, where it is not too steep. Above 5,000 metres the terrain is usually very exposed, barren and characterised by solid rock and scree slopes.

Even up here though, you are seldom completely alone. Normal encounters include yaks, dzos, Himalayan tahr, ibex, hawks, falcons, eagles and marmots. The swift-flying bar-head goose has even been seen flying above 8,000 metres! There are humans too - busy locals on their way over a high pass into the next valley, which will eventually lead them to one of the region's many trading villages. And who knows, you might come upon the occasional Himalayan black or brown bear, snow leopard, or even a Yeti!

On the northern side the Tibetan plateau, a land area roughly equivalent in size to Western Europe, stretches off northwards towards China's Xinjiang Province. Because the Himalaya runs virtually all the way along Tibet's southern border, Tibet lies in a rain shadow area, being shielded from the Monsoon which advances from the plains of India each June and July.

As a consequence, although the average altitude on the plateau exceeds 4,000 metres, and much of it is above 5,000 metres, the snowline is at 6,000 metres - the highest anywhere in the world.

This means that most of the plateau is essentially a high altitude desert. The exception to this is brackish lakes, remaining after the Tethys sea was forced upwards and then engulfed, when the Indo-Australian and Eurasian plates collided.

These lakes, and the rivers that flow from the mountains, provide a source of life which enables explosions of green vegetation to dot the landscape. Today, carefully constructed, manmade irrigation channels allow introduced plants to grow and provide life in new areas on the plateau.

Tucked between the Himalaya and the southeastern end of the Karakoram and, in truth, also part of the Tibetan Plateau, is the 'Moonland'. This is an extremely arid region officially known as Ladakh, but also referred to as 'Little Tibet'.

Climatic Conditions

The Roof of the World is the ultimate alpine domain. Its climatic conditions are dominated by two major forces. The first is the monsoon, which assaults the region from the south every year and the second is the effect that the highest peaks on earth have on the advance of the monsoon. Depending on whether the monsoon rains can or cannot penetrate, determines what climatic conditions prevail. The resultant variation is spectacular.



In climatic terms, the four main seasons of the Himalaya and Karakoram can be loosely defined as moderate, cold, dry and wet. Generally there is higher rainfall in the east, hence Darjeeling receives very high rainfall, while in the North of the Karakoram it is much lower. The onset of the Monsoon is also a little earlier in the east than the west.

Generally, due to the high altitude, particularly on the Tibetan Plateau, the daily temperature range can be dramatic. On a sunny day 35 degrees Celsius is not unusual. At night it may then plummet well below zero.

In Darjeeling and Nepal, the rains normally fall between June and early October, with the Monsoon being most pronounced in July. During this period the mountains are usually shrouded in rain-clouds. In the forests, blood sucking leeches abound.

As the rains abate in early October day-times become warm and nights pleasantly cool. Vegetation is at its greenest and the sky is clear. This is a wonderful time to be in the mountains. From December, much colder temperatures and snowfall prevail, but the air is still clear and crisp.

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The dry season begins around March. Temperatures are much warmer and the flowers paint the hillsides in glorious colours. However, the sky tends to be hazy so that the mountain views are not as clear as in the cooler months.

Further west in the Karakoram, May and June offer moderate temperatures and plenty of sunshine. This is a pleasant time to be in the region. In July the Monsoon brings steady rain south of Kohistan through until mid September. Further north, as far as the Hunza, the weather is characterized by summer storms.

By October the weather has become dry and moderate again, with clear skies. This is also a lovely time to be in the Karakoram. However, with the onset of winter conditions in November, heavy snowfalls and freezing temperatures make much of the area impassable. The coldest months are January and February.



Being in a rainshadow area, the Tibetan Plateau is not so obviously affected by the Monsoon. The most favourable weather is in May and June when it is settled, cool and clear. By July it becomes very hot, dry and dusty. Violent dust storms can be particularly unpleasant at this time.

What little rain that there is in Tibet mostly falls in November and December, when washouts and mudslides are common. By January, it has become very cold again and snowstorms are common.



Above, a clear autumn day in the khumbu Top right, a sand storm in Tibet
Right, below Rakaposhi base camp in late August, Karakoram