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Mapping Mountains: Making/Unmaking the *Manaskhand*

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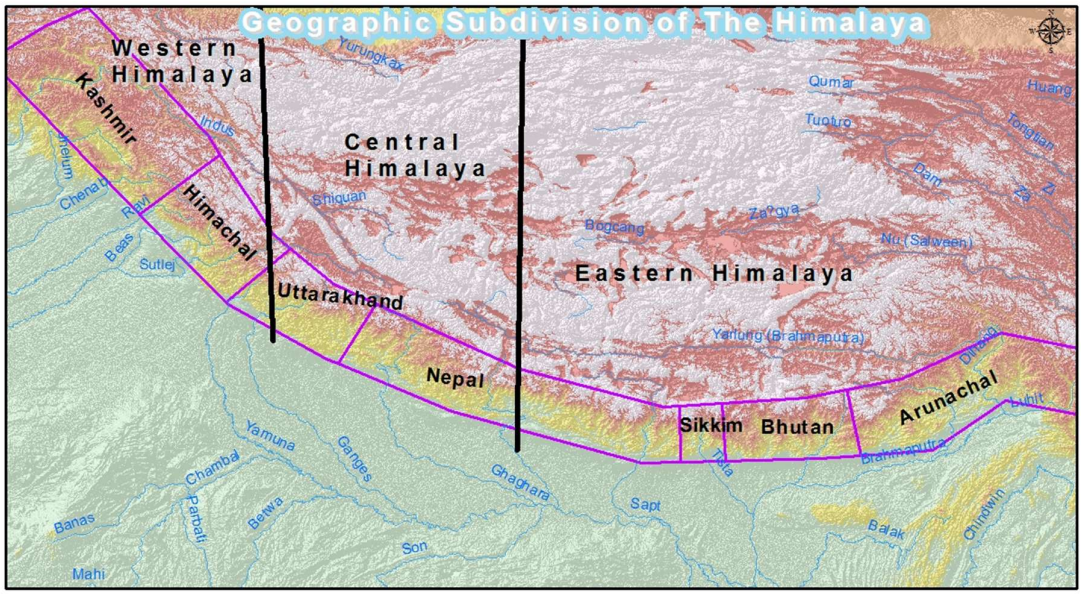
Abstract

In the late eighteenth century, the East India Company, keen to access Central Asian and Himalayan trade routes, sent explorers along the Central Himalayan routes. After the conquest of Kumaun, the Survey of India and the Trigonometrical Survey were entrusted with the task of mapping the mountains and the lands beyond the Himalayas. This cartographic exercise reveals the innovative use of contemporary science, technology and statecraft. The excitement of surveying terra incognita, mobilised European adventurers, who were unable to enter Tibet. Eventually, it was the Pundits (local hill folk) whose surreptitious entry, as pilgrims, provided the desired breakthrough. Within a century, British dominion brought railways to the foothills, connected it to a road network which linked the Himalayas to North India. The administrative focus on revenue generation brought forests under regulation, which identified the peasant as the nodal point of the agro-pastoral economy. The altitudinal 'verticality' that characterized the Himalayas from the trans-Himalaya to the Tarai, was eroded. During Imperial rule, the High Himalayas became a frontier, and trans-Himalaya alien and inaccessible. The integrity of the reon celebrated as an interconnected cultural landscape in the Manaskhand and folk traditions was disaggregated into the borderlands of Kumaun, Western Tibet and Western Nepal. This suppressed a history of cultural linkage dating back to (at least) two millennia.

Keywords: Himalayas, Trans-Himalayas, Manaskhand, Kailash Manasarovar, Verticality

Historical Background

The map shown below is of the Central Himalayas, made by Bhupendra Mehta. It is based on geologist K. S. Valdiya and S. B. Bhatia's divisions of the Himalaya (1980, 283–298). It does not follow traditional colonial historiography, which depicts only Nepal as Central Himalayas.



The division of Himalayas as depicted in the map above argues for the ecological interconnectedness of Western Tibet, Far Western Nepal and present-day Uttarakhand. The significance of this system lay in its altitudinal verticality, (Murra 1968, 115–151) which connected different biomes through a cyclical and systematic utilisation of natural resources, through the seasons. These variegated agro-pastoral regimes began in pre-historic period, that is the tenth century BCE, and were well established by the twelfth century CE. By the twelfth century CE, terraced agriculture and rice cultivation had developed in the mountains (rain fed) and the valleys (based on transplanting and irrigation). Western Tibet, the pasturelands of the Upper Himalayas, the grain producing regions of the middle Himalayas and the grasslands of the Tarai were connected by Bhotiya shepherds and traders in a network that involved exchange of grain/rice for salt. Though the Tarai provided fodder and forage for flocks along with a single crop during the winter season, as a habitat known for the fevers, (later identified as malaria), it circumscribed the mountain landscape and its ecologies (Pande 2018b,19–60).

The significance of the *Manaskhand* (an eighteenth century Sanskrit manuscript which describes the region of Kumaun, Far West Nepal and Kailash Manasarovar as one section of the Himalayas) lay in its envisioning Kailash Manasarovar as a part of the Central Himalayan landscape. The history of this geographical understanding dates back to trade linkages within the Upper Himalaya and Trans-Himalaya (Nautiyal and Bhatt 2009, 205–16). This connection was forged very early, by the second millennium BCE.

The dates for an agro-pastoral system in Western Tibet, are around 800 BCE. Surveys confirm that the pastures of Tibet are man-made, as are the *bugyals* of the High Himalaya, replacing forest with grassland, the work of pastoralists. From the first millennium BCE to 850 CE, metal mining and working transformed trade networks. Gold was an important metal, found in Himalayan rivers and in Western Tibet. Besides gold, copper, iron, lead, were also found in the Himalayas. Gold mines of South Asia were so well known that the ancient Greek

historian Herodotus has talked about the presence of gold-digging ants. We, therefore, find interesting stories about Suvarnabhumi and giant ants who dig out the gold. These are mentioned in Megasthenes's *Indika* as stories about the fabulous races and tribes which resurface in Prayag Joshi's descriptions (Joshi 1994, 100–128; Joshi 1990, 1–22) This evidence suggests that places we find inaccessible today were occupied and used as human settlements (Aldenderfer 2013, 293–318).

The western and central Tibetan valleys, contiguous with the Central Himalayas, offered scope for extensive human settlement. It is in the area, around the region of Kailas Manasarovar, that research reveals extensive settlements, both sedentary and pastoral, that formed one of the largest polities that emerged in early Tibet. This was the fabled polity of Zhang Zhung, that nurtured Bon and controlled much of the Trans-Himalayan valleys (Bellezza, 2014, 75–202). Tucci says that its southern provinces were vaguely known to India as Suvarnabhumi, Strirajya and Cina when it passed under the vast Tibetan Empire from the seventh to the ninth century (Tucci, 1956, 92–105).

The emergence of the first historical dynasty of Uttarakhand—the Katyuris, in the seventh century CE, along the passes of the Trans-Himalayas, (Nautiyal, 1969, 46–64) suggests the importance of the connection with Tibet. In the ninth century CE, the breakup of the Tibetan Empire heralded a new era in Western Tibet and the contiguous territory of the Himalayas. A new state of Ngari Kor Sum was formed which consisted of three circles—Purang in the south, Guge in the centre, and Rutok in the north (including Ladakh). Two centuries later, the Khasa/Yatse Kingdom was established by Nagaraja (according to the Dullu Inscription and the Tibetan records) (Ryavec 2015, 72–82).

The establishment of a Khasa kingdom, at Sinja, along the Karnali River, marks an epochal change. It covered a large territory in the Central Himalaya and Trans-Himalaya—Western Nepal, Southwestern Tibet, Kumaun, and Garhwal (Adhikari 1988, 21–62). The Cinachara tradition was probably followed in this region, (Bharti 1965, 58–84) and the Ramola corpus of stories (of the high Himalayas and trans-Himalayas) may be linked to this epoch (Oakley and Gairola 1977, 95–99; Nautiyal 1997, 49–109; Joshi 1994, 3–130).

In an agro-pastoral system, where mobility was the key, the stories are full of journeys across unfamiliar landscapes, which require super heroic powers. These stories span from the plains (that is, the Tarai) to the *Pyula* (yellow) *bhabhar*, across the Nangar (middle Himalayas) to the *bugyals* (alpine pastures) to the different hued *sagar* (oceans), and beyond to *baruli bhotant*, Hunadesh, Cina and Mahacina.

As per the stories, in the journeys to the south, the pastoralists travel with their animals, but in their journeys northwards they travel with *paris* (fairies). Fairyland is supposed to be located between the *Nagaloka* and *Shweta Sagar* (White Ocean). Here, pastures and clouds blend with each other, the land looks golden, is full of lakes, and sometimes the lakes are filled with yellow pollen. The fairies climb to heaven on the rainbow and inhabit spaces where rivers originate (Joshi 1994, iv). Such stories are also found in the *Puranas*, stories of Yakshas and

Kinners, people who are both men and women, described either as a group of sisters or as brothers.

There are also stories of heroes, linked to the trans-Himalayan Nagas, who are enticed by beautiful women from far away snow-covered lands, who appear in dreams and challenge the protagonists to get them, by overcoming many physical and social obstacles. The names of the women are linked with snow—Himali, of snow (in Surju Kunwar) Hyunkali, dark snow (Doodh Kanwal) Hyulavati, snow damsel (in Barmi Kanwal).

In one such story, the hero, a Ramola, is smitten by the sight of a woman in his dream. He refuses to listen when his family dissuades him from making such an arduous journey. After making due preparations, he sets off. He faces obstacles on every leg of the journey. On the way to Mahacina, in the north, Ramola first encounters the *ashvamukha* (horseface) *desh* (country) where men have the face of a horse and the body of a man. In the journey ahead, he reaches *kukurmukh desh*, where men have the face of a dog. From dog face country, they proceed to a country where men have only *ek-kaniya* (one ear), and from there to *lamkanya* (long-eared country), where people have such long ears that they double up as bedding and provide cover whilst sleeping. Then there are the one-legged people who obstruct the road to Mahacina. Also, many oceans—yellow, green, red, black, and white—are crossed before the multi-storeyed houses appear. The beautiful woman from the protagonist's dream lives here. She is then won through stratagem with the magic of the gurus—Sidwa and Bidwa (Joshi 1994, ii–iv).

In the Doodhkanwal story, Doodhkanwal and Hyunkali go together to the fair at Kailash Manasarovar via Kailash Kafar, Hemkund Lokapal, Takula-Tirchen Gompa and Garbyang. (Joshi 1994 Part 2, 1–35). The couple, who are akin to cooing pigeons, face hostile Huniyas and pilgrims from Cina and Mahacina. They are initially saved by a *surajvanshi* horse who flies above the tents and the ferocious dogs, but eventually the horse is trapped. The couple are put in prison and fed buckwheat and amaranth. Eventually, the protagonist's brother finds him, uses his magical powers to bring him back home and the hero is welcomed home with much fanfare, with his Huniya bride.

In another narration, Surju Kanwar and Barmi Kanwar are Nagas and the women are named Jotamala, and Motimala respectively. In his collection there is reference to Baruli Bhotant and he suggests through his reading of Rahul Sankrityayan that the stories be linked with the King of Tibet and his encounter with Dharam Pal in 750 to 770 (Babulkar 1964, 131–153). We may note therefore that Himalayan histories are deeply, both the folk and that of the high tradition, implicated with the Trans-Himalayan narratives, and this connection needs to be emphasised.

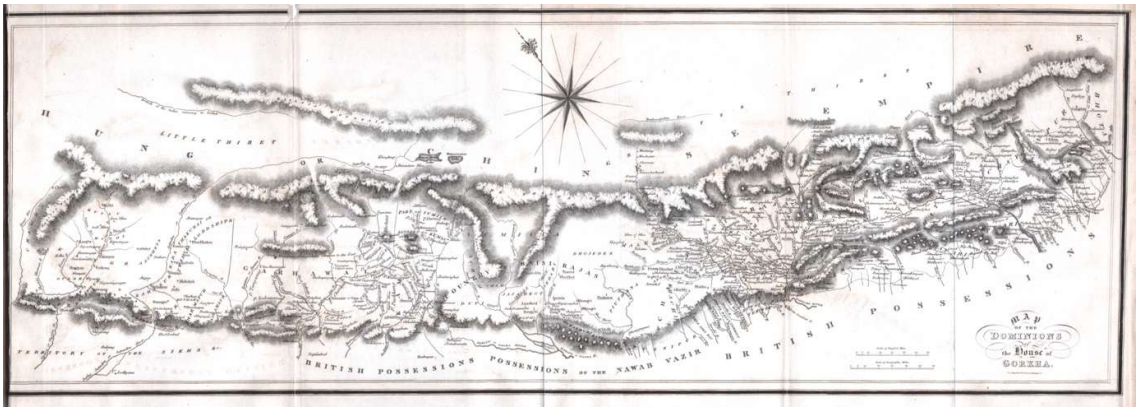
The introduction of paddy cultivation in Jumla, far western Nepal, between the twelfth and fourteenth centuries (Devakota 1994, 1–15; Bishop 1978, 531–43) was an important innovation. This introduction is still revered in folk traditions. It promoted demographic growth and led to the emergence of the terraced hillsides of the Baisi and Chaubaisi polities

(Kirkpatrick 1811, 234–235). Population growth led to a southward shift, promoting colonisation of the Tarai, from around the fifteenth century CE (Pande 2018, 143). The Tarai, with its awl fevers, was best utilised in the winter by different types of pastoralists from the trans-Himalayas, high Himalayas and by the agro-pastoralists of the middle Himalayas. It even provided one harvest for transhumant groups of the lower Himalayas.

The introduction of maize cultivation (Regmi 1978, 8) produced another demographic upsurge and led to the rise of the House of Gorkha. The latter annexed various Himalayan principalities from the Teesta river in the east to the Sutlej in the west to produce the mighty Gorkha Empire (Stiller 1973, 32–74).

But the Tarai was hotly contested, and was under threat from the Katehir Rajputs, the Rohillas and the Sikhs (all from the south). The Sikhs were at the doors of Kangra and Himachal states, keen to take over the Tibetan trade. The Rohillas, established by the Mughals in the Katehir region to counter the insurgent Rajputs, wanted to extend their kingdom to the Shivaliks and beyond. They defeated the joint armies of Kumaun and Garhwal in 1744. The Nawab of Awadh and the East India Company (EIC) also aspired for control over the mountain trade, and eyed the Tibetan trade famous for gold and borax.

The Kumaun Tarai overrun by the Rohillas in the mid eighteenth century CE, eventually came under the control of Nandram Das, who owed allegiance to the Nawab of Awadh. The Nepal Tarai of Makwanpur, Chaudandi and Bijayapur, was under the Sena kings of Palpa which maintained excellent relations with the Nawab of Awadh. Large quantities of grain were exported from the Tarai region (Regmi 1978, 5). It was also home to important trade marts and the aforementioned kingdoms in this region controlled mines of copper, iron, zinc, and cinnabar. In 1804, Palpa was finally annexed by Gorkha. This helped the Gorkha claim over parts of the Butawal Tarai.



A map from *An Account of the Kingdom of Nepal* (1819) by Francis Hamilton

The British control over Awadh and contest over Butawal brought matters to a head and precipitated the Anglo Gorkha War of 1815-16. The Gorkhas lost the western and eastern borders of their empire and were restricted to the mountains. Kumaun and Garhwal (the

Kumaun Division) were annexed and became a part of the EIC controlled territory. The Kali (also known as Sharda) river now formed the eastern border with Nepal. To the west lay the Kingdom of Tehri and beyond that were the Himalayan states, but to the North lay Tibet designated in Webb's map as 'Chinese Tartary.' This had to be mapped and conquered, a process that had begun even before the conquest of Kumaun.

An old map of Kumaun. Source: https://pahar.in/pahar/Maps--Primary/Indian%20Subcontinent%20Maps/Indian%20Subcontinent--Pre-1899/1819%20Kumaon%20by%20Webb.jpgaccessed8 November 2025

Making the Northern Frontier with Western Tibet

From 1816 onwards, British interest lay in developing trade to the north of the Himalayan chain, with western Tibet (Cammann 1951, 144–154). The *pashm* (shawl wool) trade was of particular interest, but it took almost ninety years to reach Gartok. The story of this journey required mapping the highest mountains, and the region that is literally known as the 'roof of the world.' Sherring's journey in 1905, (Sherring 1906, 9–29 and 291–339) was the culmination of this striving. It documented Kailash and Manasarovar as the abode of the Gods and hoped for an increase in pilgrims (almost simultaneous with Younghusband's entry into Tibet from the East).

The European project of studying and mapping mountains begun by Alexander van Humboldt influenced the exploration of Asia's high ranges. It led to a debate about height of the Himalayas, because it was difficult for the Europeans to accept that Asian mountains could

be higher than the Alps. James Rennell, the prominent eighteenth-century cartographer and first Surveyor General of Bengal, speculated that the Himalaya may be "among the highest of the mountains of the old hemisphere," because of their visibility from great distances and the occurrence of perpetual snow (Rennell 1788, 256).

In 1803, Charles Crawford attempted a reconnaissance of the Himalayan heights while in Kathmandu. In 1807, R. H. Colebrooke, the Surveyor General of Bengal, measured some angles and suggested that the Himalayas may be higher than the Andes mountains. Between 1808 and 1810, Captain Webb fixed the height of Dhaulagiri (a prominent mountain in Nepal) from four different stations. By using trigonometry, he calculated its height at 26, 862 feet (Mason 1955, 64–65). Apparently, Webb's calculations were received with scepticism in London, because he was a low-ranking functionary in the EIC (Fleetwood 2022, 41).

In 1816, H.T. Colebrooke (based on Crawford and Webb), asserted that Himalayan mountains were higher than the Alps and the Andes (Colebrooke 1816, 252). Lachlan Fleetwood documents the scepticism of the European scholars in *Quarterly Review* of 1817, about Colebrooke and Webb's tall claims and notes that, "in an unevenly updated 1822 edition of *The Hundred Wonders of the World*, for example, the author could still assert that 'the Andes, in South America, are the loftiest, the most extensive, and, therefore, the most wonderful' mountains, while the Himalaya will be found to fall considerably short of the height attributed to them by Mr. Colebrooke" (Fleetwood 2022, 44). This criticism questioned the ability and method of the surveyors, without barometer and other instruments.

Around 1816, Humboldt, engaged with the idea of the snowline for calculation of verticality and accepted the arguments of Webb and his supporter James Herbert (former Surveyor General), who demoted Chimborazo's claim as the highest mountain in the world (Herbert 1842, xxvi). Henry Colebrooke's contention in the *Quarterly Review* of 1820, established the Himalayas as the highest mountain range in the world. But the question of how much higher they were—and, more especially, which was the highest of all—also became a matter of interest. Though their significance for a vertical globe was accepted, the various ranges (from east to west and north to south), specific peaks had to be surveyed and their topography fixed. Tartary/Tibet still lay out of bounds for European explorers and control over Kumaun provided a tenuous foothold to territories beyond the highlands. Ranjit Singh's empire in the west (Kashmir and Punjab) and Nepal further east (central and eastern Himalayas) were both hostile and Tibet remained uncharted territory.

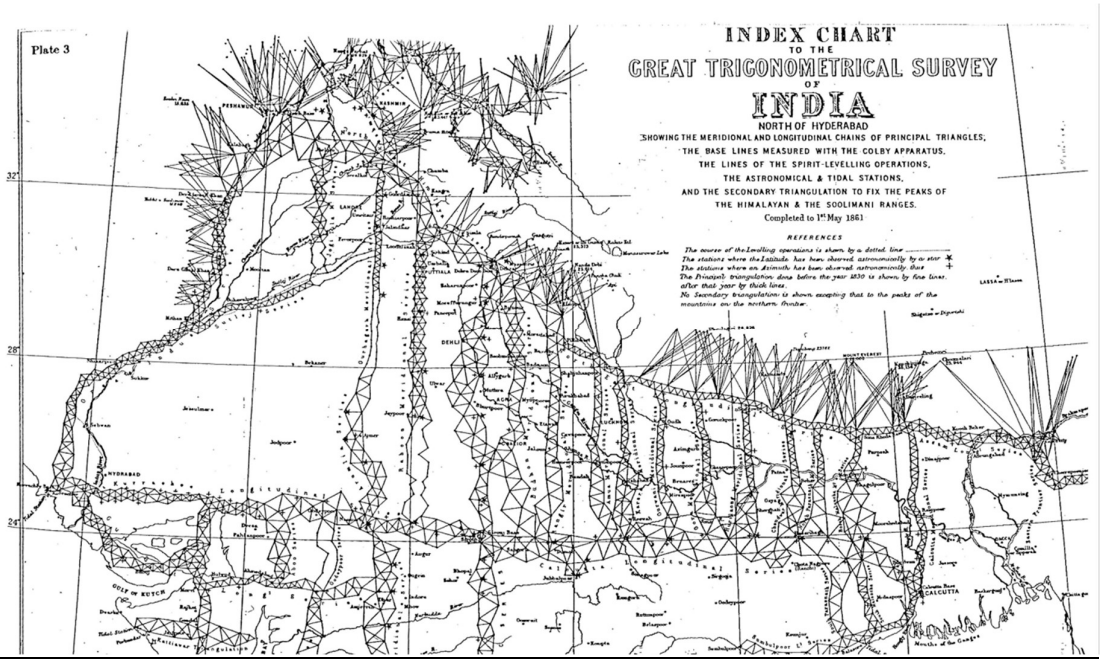
As Fleetwood notes, "Initially, the sheer verticality of the mountains seemed reassuring. Early European travellers echoed the supposed impenetrability of Himalaya, (but soon) …. such comforting rhetoric quickly became unsustainable" (Fleetwood 2022, 50) and the porosity of the frontier through passes added to the insecurity of the EIC state.

The first half of the nineteenth century was spent on developing connectivity and exploring by the Gerard brothers and EIC functionaries—William Webb, John Hodgson, James Herbert, Henry and Richard Strachey. Arriving at credible information for sceptical western

readers was not easy and the explorers of the early half of the nineteenth century used scientific instruments like the thermometer, barometer, hypsometer and theodolite along with survey notes to establish their credentials. In the 1820s, use of the mountain barometer was the preferred method for measuring altitude and was used by William Kirkpatrick for Nepal. But such instruments were fragile and difficult to carry up mountain peaks. Replacing the rubber tube could be done on the field location, but its accuracy was a little suspect (Strachey 1900, 165–167).

A logistical problem was that the barometers were not designed to calibrate Himalayan heights. Both commensurability and method were critical for measuring Himalayan altitudes and were constantly invoked by EIC surveyors. It was the Trigonometrical Survey which eventually settled the height of the Himalayas.

By the end of 1832, a longitudinal series of triangles were completed from Seronj to Calcutta, where another base line was measured. Upon the completion of that work the measurement of the great arc was recommenced, after a gap of seven years. It was carried on from that time unremittingly till December 1841, when the whole Indian arc from Cape Comorin to the Himalayas, forming the main axis of Indian geography, was finally completed. The final work of triangulation and establishing the height of the mountain peaks of the Himalayas is described in great detail by Phillimore who notes, "In March 1856 the Surveyor General issued 8 complete list of peaks in serial order **I** to **L X** with the local names where known, and the observer's' distinguishing characteristics" (Waugh 1968, 92). John Keay describes the event in the *Great Arc* (Keay 2000, 157–171).



Though, the mountains were mapped and their height established, the British government had to remove the blank spaces in the map, beyond the borders. But how was this to be done? Moorcroft, G. W. Traill, Alexander Gerard, William Webb, Victor Jacquemont were all firmly refused access to Tibet. The difficulty faced by non-Asians in travelling beyond the Himalayan passes, into Inner Asia and Central Asia, even with disguise, made them realise that boundary making required boundary crossing.

In 1846, after the first Anglo-Sikh war, Gulab Singh agreed to the appointment of Commissioners to demarcate territory between Ladakh and Tibet. Letters were also sent to Tibetan and Chinese Commissioners, but did not elicit a response. A second commission, headed by Alexander Cunningham was appointed with specific instructions to enter Tibet. The British commissioner established the boundary but without a joint demarcation. By 1848-9, British interest in connectivity for commerce from the western Himalayas, led to the making of the Hindustan Tibet road. Begun by Lord Dalhousie, and built from the 1850 to the 60s, it connected the western Himalayas to Tibet. Though its utility for commerce appears to have been limited, the road was used, "by a growing number of hunters, tourists, geologists, and botanists, but rarely by traders" (Gardner 2014, 71–84).

Between 1846 and 1849, the Strachey brothers, Henry and Richard, conducted route surveys in Kumaun. They collected scientific specimens, produced essays and maps on the geology and physical geography of the Himalayas. They succeeded in making journeys to Manasarovar but were dependent on two assistants—Rechung or Rechu, (a Bhotia), the *Padhan* of Kunti village and Bhauna Hatwal (Khasia) (Strachey 1848, 98–551). Strachey mentions Rechu's resistance (maybe because of fear of being caught) to the idea of circumambulation of Lake Manasarovar and reports this as the reason for not completing the *parikrama.* Measuring the Himalayas was thus a political act which required tenacity and skilled manoeuvring.

In 1839, the Royal Society was approached by the German Embassy in London with a proposition from Baron Humboldt for a scientific mission to the Himalayan mountains to be led by Hermann and Adolf Schlagentweit. The duo had already done useful work in the European Alps. Their brief was the magnetic survey and Adolf hoped to, "collect as complete a series possible of observations on the geology of India and of the Himalaya. It will be very essential to ascertain the elevation of many important points by barometrical, or in part by trigonometrical observations, and to work out accurate sections and geological maps**.** We shall collect fossils for the accurate determination of the comparative ages of the different sedimentary strata" (Waugh 1968, 144–147). They asked for and were given instruments for survey by the EIC and were also provided logistical support by the EIC officials.

The brothers worked directly with the Trigonometrical Survey of India. In 1854–55, Adolf and Robert travelled through from Calcutta to Kumaun. From Kumaun, they went to the Tibetan frontier, after having reached the environs of Nanda Devi and Milam at heights of 18,000 and 20,000 feet. After visiting the glaciers of the higher mountains, they dodged the frontier guards, (like Moorcraft and Hearsay before them) reached Gartok, and then returned

to Mussoorie via Badrinath and Kedarnath. Their travels involved covering over 18,000 miles on foot, across forests, plains, deltas, deserts, hills, and through snow.

Subsequently, the brothers fell out of favour with the government, when Montgomerie noted that the Schlagentweit readings are inaccurate for Garhwal, Kumaun, and Gnari. He recommended that the values given by Captain Strachey be retained. It was argued that the use of chronometers did not help and British officials complained that they, "have perhaps had but little experience in the use of chronometers… Had the Schlagentweit consulted standard works as to the determination of longitude, they would have known how objectionable it is considered to use chronometers to determine minor differences of longitude by a long journey in a meridional direction, such as theirs from Simla to Leh" Waugh 1968, 147). In his review Phillimore says that the Schlagentweits were not surveyors, and had little or no experience in the use of barometers, chronometers, and other surveying instruments they carried, though he does point out that they were, accomplished artists and keen observers, and conscientious in recording and collecting evidence on the products and natural history of the countries they visited.

In 1857, one of the brothers returning from an overland journey to Russia was beheaded at Kashgar on suspicion of being a Chinese spy. As Oyndrila Sarkar notes, "Certainly, after the episode of the Schlagintweits, the British became more aware of the danger of sending survey missions to lands where they had little or no influence, and in employing explorers over whom they had little or no control" (Sarkar 2017, 544–565).

Eventually, securing the trans-Himalayan frontier meant mapping it with the support of local communities. Porters were an indispensable part of explorations and mobilisation of labour inevitably required the help of state functionaries. But often it was the guides who helped the surveyors in innumerable ways. Choosing the guide was often done with the help of local elites and administrative assistants, like the *patwaris*, who understood topography and terrain. It was for this reason that in the reconnaissance of the Himalayan places like Kumaun and Garhwal, the guides came to play an "outsized role in imperial imaginative repertories" (Fleetwood 2022, 229).

As a result, the Great Trigonometrical Survey of India decided to oversee the training of a corps of native explorers, the so-called Pundit brothers. Mani Singh, the son of Debi Singh, who had befriended Moorcroft and Hearsey in 1812, the *patwari* of Milam village (1851 and 1863) was recommended by Major Smythe, Education Officer of Kumaun, to Walker and Montgomerie for training as a surveyor[i] (Mason 1955, 84). Mani Singh had accompanied them from the Upper Indus Valley to the Abi Gamin peak on the Chinese border, and Nain Singh had helped them during their travels to the north-eastern part of India" (Sarkar 2017, 544–565).

The story of the Kumauni 'Pandits' and their contribution to mapping Central Asia, the Pamirs, and Tibet has been discussed intensively. Without these native surveyors, Britain would not have succeeded in its secret survey of Tibet. Derek Waller's *The Pandits* is the latest in a long series of writings that narrates this story (Waller 1990, 22–31). Shekhar Pathak and

Uma Bhatt's volume with the handwritten diaries of the explorer Nain Singh, in Hindi, helps locate the historical context (Bhatt and Pathak 2006, 21–24). Tapsi Mathur makes an interesting point, when referring to the relationship of the native surveyors with their English superiors, "While the Pundits made traverse surveys using the compass, calculated latitude using the sextant, and kept a running tally of their steps to calculate distance, Trotter could devote himself to checking and re-establishing several points via astronomical observations using his theodolite" (Mathur 2018, 182).

The explorations of the 1860s and 1870s, by Englishmen and Indians, opened up the Himalayas, the trans-Himalayas and Tibet. A route parallel and across to the north of the Himalayan ranges, was found which linked the Indian sub-continent to Central Asia and China. Brian Hodgson had already declared this road, "the highway of mankind"[ii] (Hodgson 1874, 33). The mapping of Tibet, generated a keen interest in its history, ethnography, religious practices and its natural resources. By the 1880s, rail connections to the foothills encouraged travel to the hill stations of Simla, Mussoorie, Ranikhet, Nainital, and Darjeeling. The *fin de-siècle*, therefore, marked an intense rush to explore Tibet by Europeans, adventurers and government officials. Among the explorers were British, Russians, French, Germans, Moravian missionaries, Austrians, Swedes and Americans.

A Survey Party at work in the Himalayan mountains, 1897. Source: https://pahar.in/1891-1909-survey-of-india-images/accessed 8November2025

Significant archaeological and geographical discoveries were led by Nicolas Prejevalsky (1839–1888) a Russian, who helped establish Tibet's link with the Silk Road. German geographer and traveller Ferdinand von Richthofen first used the term 'silk road' in 1877. His student Sven Hedin (1865–1952), a Swede, set out on an exploratory journey, found the Taklamakan Desert, Lop Nur Lake and helped establish their historicity. Hedin and Aurel Stein (1862–1943), a Hungarian born British, and others in the late nineteenth and early twentieth centuries, further documented this region. Hedin was the first to explore the Trans-Himalaya mountain ranges of Tibet and prepared a detailed map of the country (1905–08). It revealed the inter-connections of High Asia with Central Asia and China.

For the British, establishing the Northern boundary of the Empire meant managing Russia and China. Though the great hope that Indian trade could be linked to China via Tibet was discarded, the Convention of Calcutta or Anglo-Chinese Convention of 1890, was a treaty between Britain and Qing China relating to Tibet and the Kingdom of Sikkim. It was signed by Viceroy of India, Lord Lansdowne and Sheng Tai, the Chinese Amban in Tibet, on March 17, 1890 in Calcutta, India. The Convention recognised a British protectorate over Sikkim and demarcated the Sikkim–Tibet border.

H. Bower's adventures in the 1890s provides an interesting perspective on further developments. Bower was sent with British troops to catch Dad Mahomed who had hacked Andrew Dagleish, a Scots trader on his way from Leh to Yarkand, in 1888. Mahomed escaped and Bower went in search of him into Chinese Turkestan. He later travelled to Tibet and received the Royal Geographical Society's Founder Medal for his, remarkable journey across Tibet, from west to east. Since China negotiated the treaty without consulting Tibet, the Tibetans refused to recognise it.

In this context, Bower's report of 1893 titled *Some Notes on Tibetan Affairs* noted that the Tibetan administration is primarily in the hands of monks and the Chinese do not exercise any power. He writes, "To take the *Peking Gazette* seriously as a guide to contemporaneous events is to me inconceivable. Its value is on a par with *Aesop's Fables* as an authoritative work on zoology. Why we should ever have allowed the Chinese have any say in Tibetan affairs I cannot understand."

Further, in his *Diary of a Journey across Tibet* (1894), Bower said that, "from a military point of view, it is quite feasible to coerce the Lhasa Government either from the south or west as with the exception of the passes the general elevation is not very great… As a general rule, it may be said that they can all be crossed at any time from midsummer to Christmas. The south and south-west also being populated, supplies sufficient for a very small force could be procured in the country, and a very small force is all that would be required to coerce the Lhasa Government."

China's inability to deliver on the treaty eventually necessitated a British expedition to Tibet in 1904, setting in motion a long chain of developments in the history of Tibet. Alex McKay notes, "On Wednesday, 3 August 1904, the Tibetan Frontier Commission pitched their

tents on the outskirts of Lhasa. Encamped there were 623 Europeans, 1,998 Indian troops and 1,450 porters and camp followers from all parts of the British Indian empire. The following morning, they marched into the Tibetan capital behind their charismatic leader, Colonel Francis Younghusband, after whom the Commission was popularly termed the 'Younghusband Mission.' His arrival in Lhasa was the culmination of 130 years of British-Indian engagement with its northern frontier, and its effects continue to be felt in Tibet today" (Mckay 2012, 5–25).

This marked the culmination of the Great Game between Britain and Russia, registered the decline of the Manchus and ended the refusal of Tibet to grant access to foreign powers. Subsequently, C. A. Sherring, the District Commissioner of Kumaun, travelled to Western Tibet. He established trade connections at Gartok in 1904 and settled the trade and frontier issue. He recorded the altitudes traversed in his journey and established the height of the Himalayas and Western Tibet.

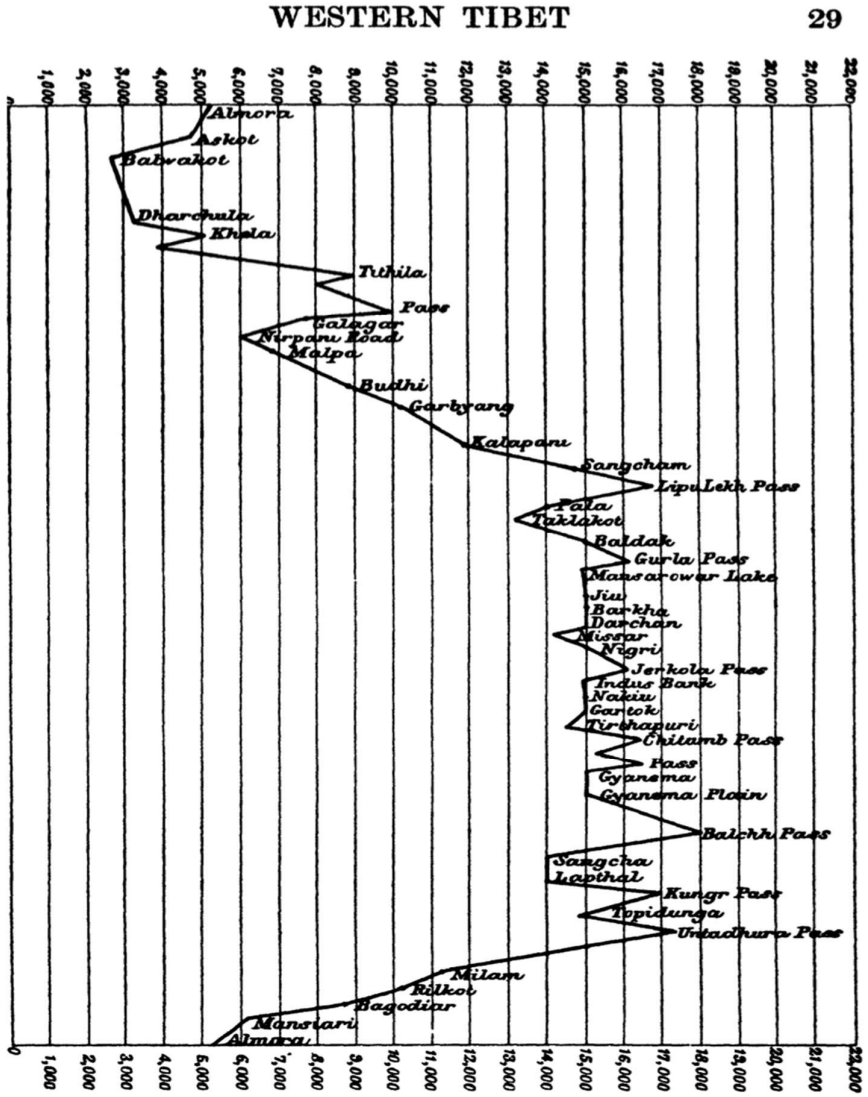


CHART OF THE ALTITUDES TRAVERSED

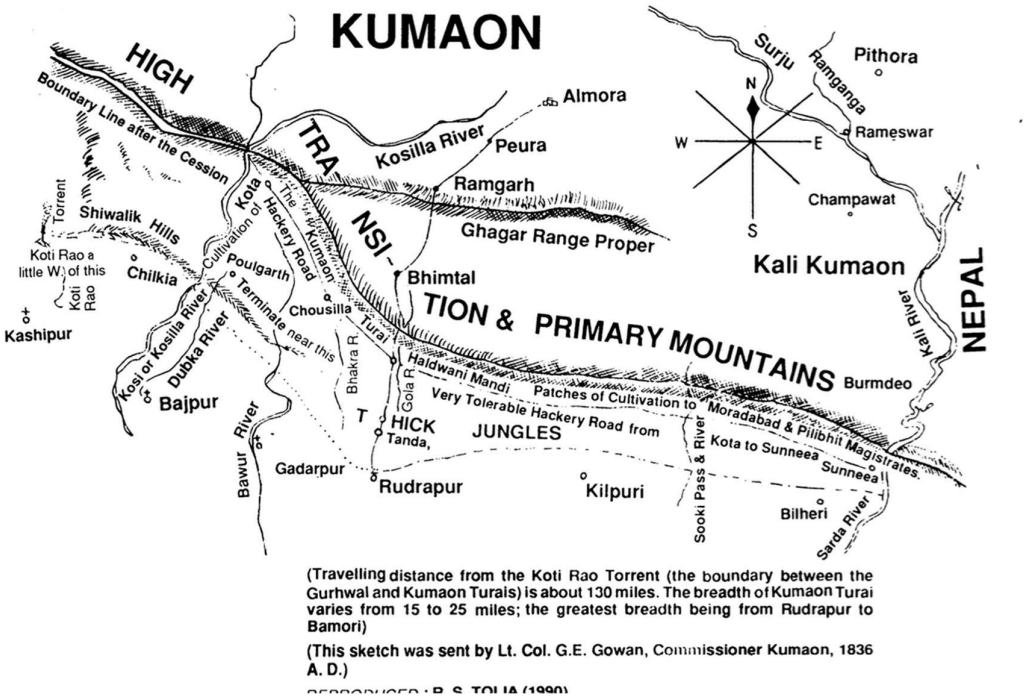
The ‘mystery’ of Tibet was solved, the northern frontier became a trading post, British presence in the region was well established. The roof of the world was now a part of British trade networks.

Hedin’s famous adventure of 1907, described in his writings on the Trans-Himalayas completed the picture. It was Hedin’s grit and dexterity that provided a full and informed picture of the topography of the region in his famous three volumes entitled *Trans-Himalayas* (I 1907, 264–275; II 1909, 401–414; III 1913, 114–165). Its significance was the discovery of an immense chain of mountains, stretching for about 600 miles, the watershed of the Brahmaputra and the Indus. By the early decades of the twentieth century, the British Empire touched Tibetan territory at three points: Spiti in the Kangra district of Punjab, British Garhwal and Kumaun and Assam at the point that the Brahmaputra entered India. Hedin’s desire to map terra incognita had led him to some great adventures, formally completed with the *A Conquest of Tibet* (1935). His drawings were portraits of people, animals, rivers, the habitat and daily encounters. In his description, over the trans-Himalaya to Shigatse, he writes, “No human beings but Tibetans had ever been here before, it was my land, I had conquered it” (Hedin 1935, 239).

The ‘conquest’ of Tibet by European mountaineers, with the help of native explorers, is an important part of the story of Empire making. Recent historiography interrogates the heroic European and chooses to applaud the native, local, subaltern assistant for providing information and human resource. We would like to argue that the use of modern science to conquer Himalayan and trans-Himalayan heights, to connect them to the Empire had important consequences for the people of the Himalayas. For the Kumaun Division of the British Empire, the making of the border with Western Tibet eroded a more than two millennium old ecological connection premised on what is broadly termed verticality.

The British Empire in the Central Himalayas, the making of ‘Kumaun’: 1816-1914

The annexation of Kumaun and Garhwal in 1816, gave the British absolute authority over a section of the Himalayan mountains and fuelled their aspirations to control the gold, borax, wool and shawl trade, further north. During the nineteenth century, the administration of the Kumaun Division, the pacification of the Tarai along with mapping the Himalayas, establishing the height of the mountains and prospecting for trade was a joint enterprise of Bengal Infantry officers, Survey of India personnel and European adventurers. This project transformed the Himalayan tracts with North India.

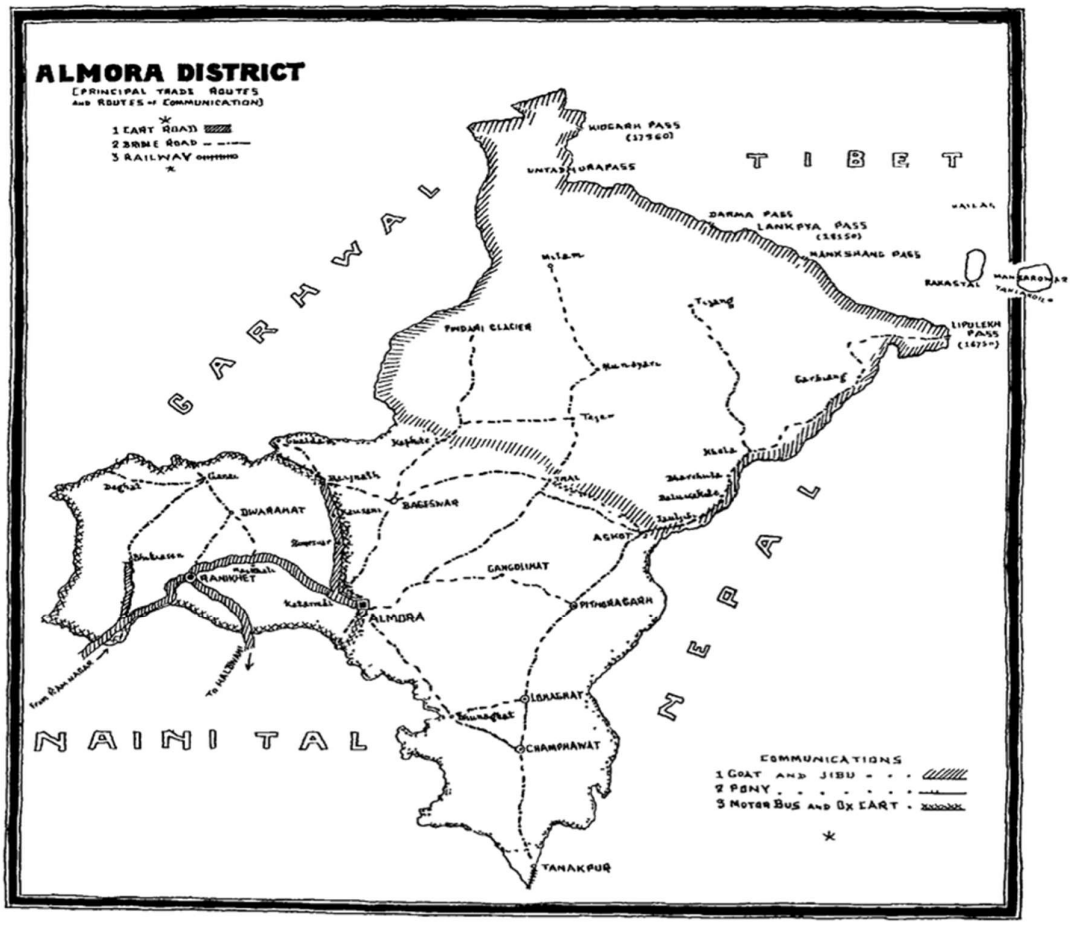


From Whalley, P. Whalley's *British Kumaon: The Law of the Extra Regulation Tracts* (1991). Varanasi: Vishwavidyalaya Publications.

By the early 1880s, communications had improved, with 470 miles of imperial road and 375 miles of road having been laid in the Bhotia region of Milam Marchula, Kapkot, Pindar, Munsyari, Thal, Askot, Tejam, Darma, Byans, Chaudans, Berinag and Chaukori[iii] (Atkinson Vol III Part 2 1882, 414-415). The late nineteenth century witnessed a spurt in the construction of roads, not only by the Public Works Department, but also by the District Boards of Almora and Nainital and also by the Forest Department. The formation of Nainital District in 1891 probably catalysed the construction of roads (Almora District Gazetteer Supplementary Notes and Statistics Vol XXXV, 11). The arrival of the railway line up to Kathgodam on October 29 1884, linked the region to the rest of north India. In 1907, a railway line to Ramnagar from Moradabad accelerated the process of integration. (Sankrityayan Samvat 2015, 191). The railway line led to the increasing importance of Haldwani, established in 1834 as a mart.

The early decades of the twentieth century saw the development of wheeled traffic in areas where there were fairly serviceable roads. Cart roads between Almora, Ranikhet, Baijnath, Ramnagar and Kathgodam allowed for the use of small bullock carts (*Vernacular Newspaper Reports* 9 June 1890, 213). By the second decade of the twentieth century, vehicular traffic had started plying along the major routes. In 1919, the price of vehicular traffic was prohibitive (*Shakti* 4 February 1919) but by 1920, Munshi H. P. Tamata started the Hill Motor

Transport Company which facilitated connectivity by bus. The lorries ran from Haldwani and Kathgodam to Almora and Ranikhet. Later, other companies also came up. All companies faced a shortage of drivers. To solve this issue, Tamata opened a Hill Motor Training School in 1921. By 1930, the major routes were well supplied, as noted by S. D. Pant.

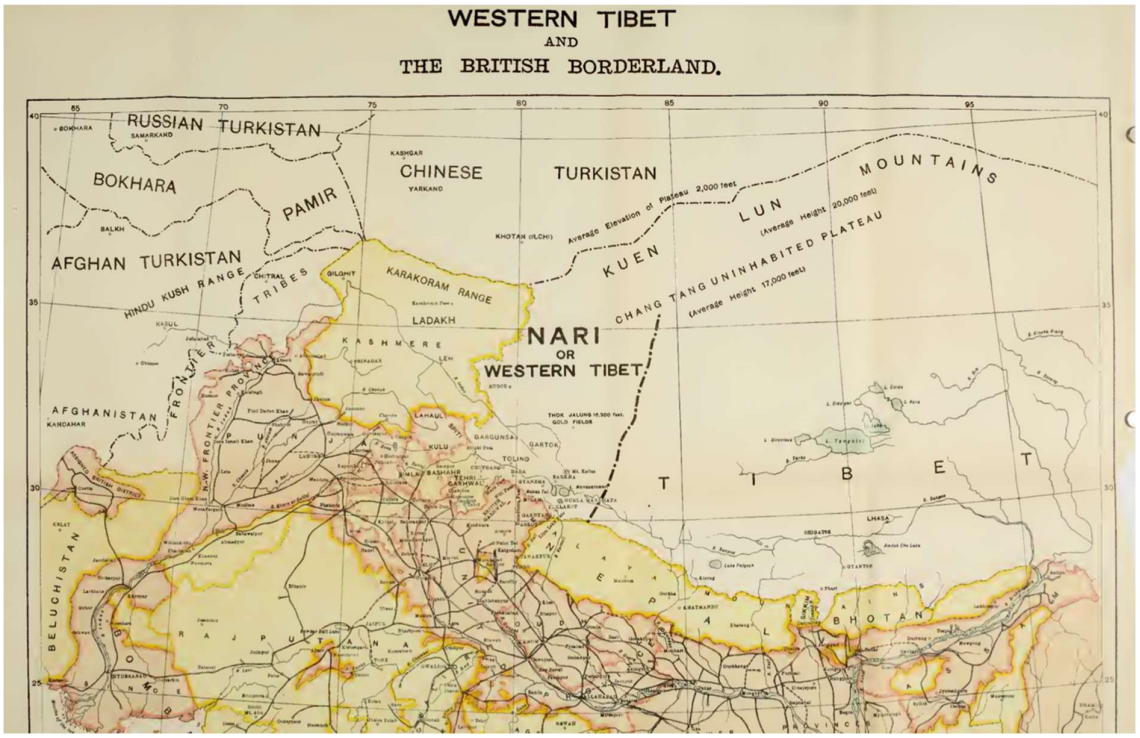


From S. D. Pant's *Social Economy of the Himalayans* (1935), between pages 208 and 209.

The Tarai ceased to be an impediment, to connectivity with Northern India, particularly after the automobile was introduced in the second decade of the twentieth century. This process eroded 'altitudinal verticality' and modified the ecological coordinates of the region. Western Tibet became the periphery and the middle Himalayas the epi-centre of colonial activity, with the establishment of towns like Dehradun, Mussoorie, Lansdowne, Pithoragarh, Nainital and with the expansion of Almora and Srinagar (Garhwal).

Gradually, as a consequence of the restructuring caused by British administrative changes, Western Tibet was regarded as distant and inaccessible, whereas the North Indian plains became the neighbourhood. Tibet now defined the Empire's northern border and Nepal the eastern boundary. By the beginning of the twentieth century, the Kumaun division became the empire's outpost with a 'honeycomb of borderlands'—Kumaun, Western Tibet and Far

Western Nepal, with the Upper Himalayas as a buffer zone for Tibet and the unfordable Kali river as the defining boundary for Nepal (Pande 2017d, 68–78; Pande 2021a, 44–79).



General Map from C. A. Sherring's *Western Tibet and the British. Borderland* (1906), before page 1.

The colonial dispensation altered the economic basis of Kumaun by integrating the region into the imperial framework. The elites of the eighteenth century who were dependent on revenue free grants and whose dominance was premised upon agrestic serfdom and slavery were removed and their lands resumed. The peasant economy based upon lineage system, village solidarity and recognition of the primacy of labour, also had to respond to official policies which encouraged individual enterprise and which based itself on heads of households as the primary revenue paying units. The need for augmentation of land revenue facilitated the extension into the commons and the Tarai. The increased monetisation of the economy, supported only a limited commercialisation of agriculture. The constraints of mountain agriculture, petty peasant production and the colonial structure eroded the viability of the agricultural basis of the economy and encouraged migration from the region.

The southward orientation of the economy altered trade patterns and reduced the importance of trade with Tibet. The induction of Kumaun into the imperial economic system transformed the pattern of external trade. It ceased to export iron and copper to the south and instead started importing metal sheets. The cotton industry located in the Tarai also declined because of the introduction of English cloth, woollens and Indian cotton goods. The southward

orientation of the economy resulted in an increase in salt imports from north India, which had major implications for the trans-Himalayan trade, based upon barter exchange of salt for grain.

Earlier, Kumaun imported wool from Tibet and manufactured woollen goods locally, but all this changed because of the establishment of the woollen industry at Kanpur. Kumaun now started exporting raw wool and its woollen industry suffered a decline. The demarcation of the forests for their commercial use meant their delimitation for the Kumaun peasantry, which required the forests for its increased needs of fodder. The colonial economy therefore defined an economic regime for Kumaun which completely undermined its former autonomy and changed it to an appendage of the imperial system exporting man power resources and timber.

The construction of the 'modern' altered its ecological coordinates. The reorientation of Kumaun also meant a shift from a self-sustaining, autonomous economy to a regional unit prone to food shortages. Over the nineteenth century, Kumaun started importing grain and by the late nineteenth century it faced a deficit in food grain production. The extension of agriculture into pasture lands and marginal lands resulted in a decline of productivity, and completely transformed the agrarian system. The change in the Kumaun agrarian structure led to migration of labour, to augment income. The emergence of Kumaun as a 'modern' region with a particular geography and identifiable 'high' culture, constructed by its new intelligentsia emphasised segmentation and its discrete identity. In this process, traces of historical connection with western Tibet and western Nepal were submerged and the connection with the south (that is, North India) underlined.

Changing Geographies and Imaginaries in the Twentieth Century

By the early twentieth century, Tibet was mapped, conquered, and opened for trade with the British Empire, but in the process, it became an exotic and fabled land in the Western/European imagination. As Mckay notes, in a comprehensive review of the many Kailas traditions of the Himalayas and Tibet, "the modern understanding of Mount Kailas as the most sacred place in Tibet, Asia, Hinduism, Buddhism or Bon—actually dates only to the twentieth century" (Mckay 2006, 8). The significance of present-day pilgrimage to Kailash Manasarovar has to be located in this context.

We may trace this process through tracking the manuscript version of the *Manaskhand* which surfaces in Atkinson's narrative, in the late nineteenth century. Atkinson prefaces his notes on the *Manaskhand* in the following words,

"In form and often in verbiage it follows the model of the older *Puranas* and minutely describes the country from the lake Manasarovar in Tibet to Nanda Devi and thence along the course of the Pindar river to Karnaprayag. From this point the narrative touches the Dhanpur range and thence to the Ramganga and Kosi as far as the plains. Then along the foot of the hills to the Kali, which it follows northwards, winding up in the hills a little to the east of the Karnali. Notes are given explaining all the allusions and identifying most of the places mentioned. The writers have transferred many of the names of rivers celebrated elsewhere to comparatively

unimportant streams in the vicinity of celebrated *tirthas*, and these have in many cases been forgotten or have existed merely as literary fictions known only to the educated few thence one of the main difficulties in identifying the names given here. The work itself is and is deeply interesting as showing the form in which the actual living belief of the people is exhibited." (Atkinson 1884 II, 298). Atkinson devotes 25 pages to further details where he provides the historiography of this text.

The significance of *Manaskhand*, for Atkinson, lay in the fact that a newly mapped Tibet was part of the narrative. The local informant Rudra Dutt Pant provided him with the manuscript which was probably of eighteenth-century origin (as testified to by its Sanskrit and referred to by Rajendra Singh Rawal who attributes it to Kalu Joshi in Saka 1763/1841).

The text was probably composed by the *sanyasis*, traders (of high-value goods) who provided security as militia to the small principalities (like Baisi, Chaubaisi, Thakurais) of the highlands. Culturally, the ascetics (Pasupata Lakulisa, Nath Panthi, Bairagis, Dasnam Sanyasis, Nirankaris, Nanakpanthis) were an integral part of hill society, and according to traditional lore, the only groups who were feared by Trans-Himalayan bandits. Kumauni and Garhwali folklore is replete with stories about individuals who crossed the passes donning saffron robes and disguising themselves as ascetics (Meissner 1985, xii and Pande 2018b).

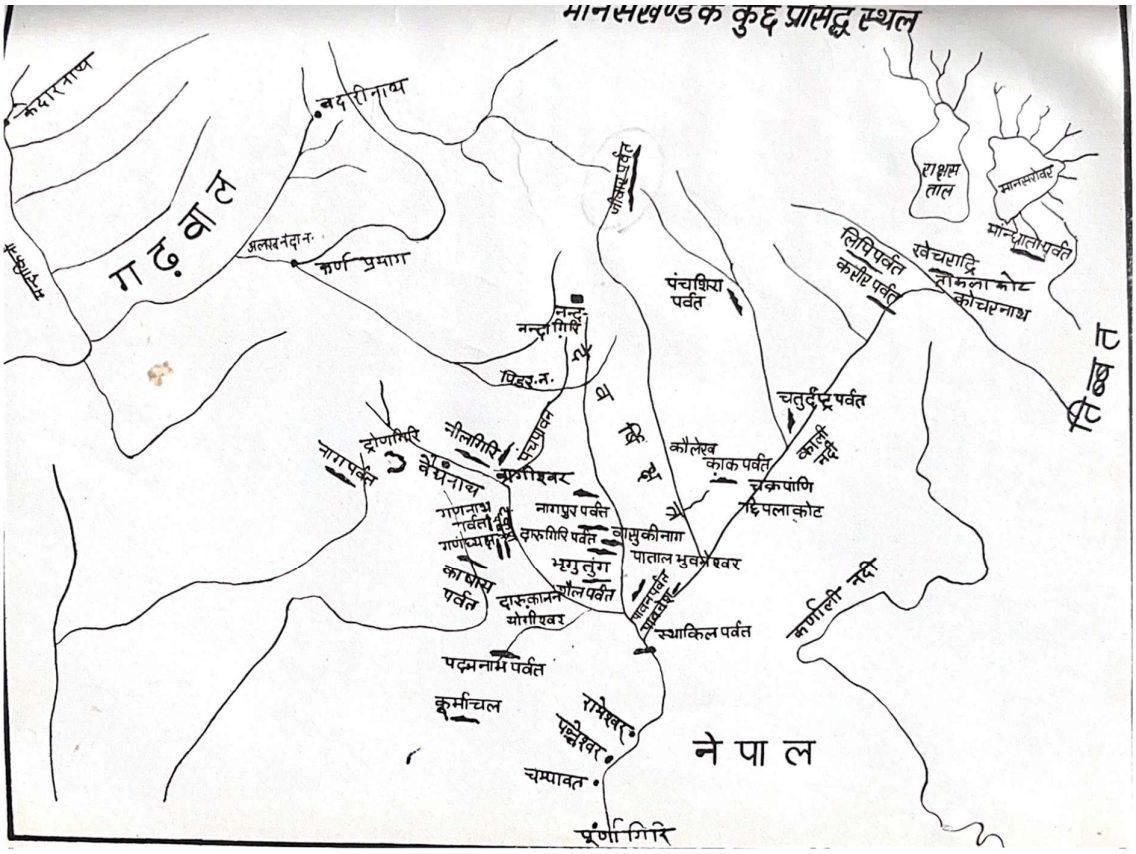
The *Manaskhand* probably originated as an attempt by the Dasnami Sanyasis to establish monopolistic control over this route, rich in minerals, crystal, precious stones and gold. British rule systematically reduced their role by denying *jagirs* (revenue-free) and *gunth* (revenue-free lands to temples and monastic institutions). Though local *jogis* (*naths* and *bairagis*) and *sanyasis* lost their dominance in colonial Kumaun, the modern pan-Indian connection brought a new wave of ascetic explorers to the Himalaya.

In the late nineteenth and early twentieth century, pilgrimage to the Central Himalayas was exceedingly difficult because of the terrain and a lack of information. Kali Kamli Wala Baba during his travels in the 1880s and Sister Nivedita also complained about this in the 1920s. Whilst Kali Kamli Wala set up support infrastructure dharamshalas on the Badrinath and Kedarnath route. Around this time, the Vishal Karyalaya also started publishing the *Mahatmyas* of Garhwal. A. M. Pinkney shows how over the twentieth century, print and later visual media helped the popularisation of Central Himalayan pilgrim routes.

Similar developments helped make Kailash Manasarovar a part of the imaginary of intrepid ascetics and householders, all over India and the world. Bhagwan Sri Hamsa's description of his journey to Kailas, in 1908, through the Kumaun route was translated from Marathi, and published as *The Holy Mountain* in 1934. It has a lengthy introduction by W. B. Yeats (Sri Hamsa 1934, 11–47) and describes a stay at Mayawati, established by the Ramakrishna Mission. Another ascetic, Narayan Swami, on a journey to Kailas Manasarovar, was so enchanted by a place near Dharchula that in 1936, he established an ashram here, which would later become the launching point for the Kailas Manasarovar Yatra.

It was Swami Pranavananda's repeated visits to Kailash from 1928 onwards, along with his writings that helped Indians visualise and think of visiting the 'sacred' site. His close survey questioned Hedin about the source of the rivers from the Kailash region. His presentations to the Royal Geographical Society and Survey of India were incorporated in their maps (Pranavananda 1949, 239). Pranavananda also endeared himself to the Tibetans and was fondly referred to as Gyagar Lama Guru, Thugu Rinpoche and Gyagar Amji. It is interesting to note that he refers to the two versions of *Kangri Karchhak*—or *Tibetan Kailash Purana*. Some years later, Rahul Sankrityayana also provided guidance about porters, goods and distance from Almora onwards in his book on Kumaun.

Though Swami Pranavananda and Sankrityayana did not refer to the *Manaskhand*, it remained in the popular imagination and the first history of Kumaun, in Hindi, referred to it (Pande 1937, 162–78) Eventually, the manuscript was edited and published by Gopal Dutt Pande in 1989. What is interesting about Pande's 'Introduction' is that most of it is devoted to the antiquity of the manuscript and its relationship with the *Skanda Purana*. It does not dwell on the specificity of Kumaun, rather on the holiness of the mountains. There is no discussion about the Kailash ranges. It obscures the historical connections between Nepal, Tibet and Kumaun and reduces the text to an inadequate, difficult to comprehend, itinerary for pilgrimage to Kailash Manasarovar.



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A map in "Introduction" of *Manaskhand* by G. D. Pande ed. 1989.

Relegated to hoary antiquity, *Manaskhand* becomes an idea of the past, which produces a sacred landscape, without a lived history, (which makes geography malleable), a new imaginary, powerfully invoked for a Hindu/Kumauni identity in a modern/contemporary context.

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