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Kyle J. Gardner

University of Chicago, kylegardner@uchicago.edu

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The Ready Materials for Another World: Frontier, Security, and the Hindustan-Tibet Road in the 19th-Century Northwestern Himalaya

Kyle J. Gardner

This article examines the different ways in which the British conceived of and configured the northwestern Himalaya in the mid-19th century. It focuses on the proposal, construction, and justification of the Hindustan-Tibet Road from the late 1840s through to the 1860s. By examining this particular episode in British frontier formation, I hope to show that the pacific perception of this “natural frontier” region allowed for a plurality of configurations that would not be possible on the more contested and violent imperial fronts. Only when this region was integrated into a conceptually unified frontier did it become subsumed into a larger imperial security rubric—and once again become considered insecure.

Keywords: Hindustan-Tibet Road, Northwestern Himalaya, British, environment, frontier, security.

Upon reaching the crest of the ridge at Semla¹, the vastness of the scene became oppressive. The lofty snowy range shone from the dense azure of the heavens... Below was heaped a shattered mass of mountains, peaks and glens, ridges and valleys, some aridly bare, others luxuriantly rich. The ready materials for another world. [Lloyd 1840: 140]

—Major Sir William Lloyd, 1821

Our policy is to keep clear of intrusion all the approaches to India, and to hold in our hands the keys of all its gates. [...] The outer frontier of the British dominion that our policy now requires us to defend, has immense circumstance. [...] The consequence of this expansion of our sphere of political influence far beyond the area of our actual dominion is that the frontiers of the British Empire are changing their character. [Lyall 1911: 375]

—Sir Alfred Lyall, 1911

Introduction

For those concerned with the geo-political expansion of British India, the nine decades stretching between these two authors presented a variety of frontier configurations on the subcontinent. Besides demarcating the often-vague limits of territorial expansion, frontiers represented a variety of imperial ambitions, fears, and technological realities. As British India’s northern boundaries were mapped and information about them was compiled to

produce more detailed systems of knowledge, the concept of frontier space became solidly tied to imperial security. Paradoxically, the more that became known about this frontier, the less “secure” it would become. By the close of the 19th century, this need for security beyond the Himalaya induced Britain to invade Tibet in order to forcibly establish diplomatic and commercial relations. The northwestern Himalayan border established by the British at the end of the first half of the 19th century still remains mostly intact today. Its’ exact location and ownership, however, remain contentious in several places. The post-independence Government of India classified its easternmost regions as part of the “inner line,” a space deemed off-limits to visitors (and in some cases, non-local Indians) for much of the 20th century, on the grounds of national security. Security has thus been at the forefront of British and Indian government policies regarding the region for well over a century. However, this was not always and exclusively so. Initially acquired through expansionistic wars, the region became—for several decades at least—a kind of laboratory for experiments in commercial and technological endeavors.

This article aims to examine the different ways in which British administrators viewed the northwestern Himalayan frontier from their early encounters with the region in the beginning of the 19th century up to the (partial) construction of the Hindustan-Tibet Road (1850s) and its immediate aftermath. Geographically speaking, this paper focuses on the western side of the northwestern Himalaya, which encompasses the modern Indian districts of Kinnaur, Kullu, Lahaul and Spiti, and Leh. As its’ primary sources are largely official and British, its’ perspective is accordingly constricted. Materials that could give us crucial and contradictory local perspectives on this particular intrusion into the region do not, to my knowledge, exist.² It is important for readers to note that while the project of building the Hindustan-Tibet Road—the focus of this paper—required the labor of hundreds of thousands of human beings, their voices remain silent.

Furthermore, as the British had very limited knowledge of, and interaction with the eastern side of the northwestern Himalaya on the Tibetan plateau during the period under consideration³ this paper will omit any substantive discussion of Tibetan and Chinese political history in the early to mid 19th century.⁴ The perception of the region as being commercially tied to Central Asia (and thus within the expanding commercial and political sphere of Russia⁵) prevented British administrators from articulating a “backdoor to China” argument for regional expansion, a common reason given for attempting to commercially

and politically engage with Tibet. The episode of the Hindustan-Tibet Road is notable, in part, for the absence of any mention of establishing communication with Lhasa, which was, as Alastair Lamb has argued, a dominant 19th century British rationale for expansion into the broader Himalayan region.

By examining this particular episode in British frontier formation, I hope to show that the pacific perception of this “natural frontier” region allowed for a plurality of configurations that would not be possible on the more contested and violent imperial fronts. Only when this region was integrated into a conceptually unified frontier did it become subsumed into a larger imperial security rubric—and once again became considered insecure. I also hope to challenge a dominant strain found in political histories of the broader Himalayan region that suggests British interest in the western Himalaya was driven almost exclusively by security concerns.⁶ Instead, I would like to suggest that the logics behind early to mid 19th century British interventions in the region were also concerned with commercial gains, securing recreational and residential space for colonists, and the technological practices that accompanied exploration and territorial solidification.

While the basic causes of the British East India Company’s expansion into the Himalaya may be explained in the broader context of European colonialism in South Asia, the specifics of British extension into the northwestern Himalaya present us with interesting and exceptional particulars. Prior to the 19th century, the northwestern Himalayan region had existed as a collection of small mountainous polities, at times highly autonomous, at other times contained within the political, economic, and cultural spheres of neighboring states. At no time till the British began solidifying their control of the region in the late 1840s, however, were these regions brought together under a unified border. The northwestern Himalaya—by the latter half of the 19th century—was incorporated into a single surveyed, mapped, and defended international frontier. That this frontier increasingly became an “international” one reflects the simultaneous processes of scientifically determining its location and diplomatically configuring those regions that lay beyond it.

Recently, Kapil Raj has extended C. A. Bayly’s studies of information flows in late 18th and 19th century British India to examine the complex circulation of technologies around South Asia—technologies partially derived from indigenous British or South Asian sources and partially the result of hybrid colonial formations on the subcontinent

(Raj 2007). On the edges of the empire, the distribution of these technologies was particularly uneven. Early intelligence “failure[s] on the fringes of empire”—as Bayly has styled the British attempts at intelligence gathering during and immediately after the Anglo-Nepalese War (1814-15)—led to the re-evaluation and institutionalization of information gathering practices (Bayly 1996: 135-141). In some cases, as Kapil Raj and Patrick Carroll have persuasively shown, colonial peripheries (India and Ireland, respectively) were at the forefront of *techarterritorialization*.⁷ In the case of the British in the northwestern Himalaya, this process is best illustrated by the construction of the Hindustan-Tibet Road, a project that coerced hundreds of thousands of laborers into the service of the British. In the essay that follows I will survey the different ways in which the British initially conceived of, and configured the northwestern Himalaya. After surveying British penetration into the region in the early 19th century, I will focus on their most substantive intervention in the region: the proposal, construction, and justification of the Hindustan-Tibet Road.

Early Encounters

Unlike the evolution of the North-West Frontier, the northwestern Himalaya, once acquired by the East India Company, provided what was generally viewed by British policy makers throughout the 19th century to be “the finest natural combination of boundary and barrier that exists in the world” (Holdich 1916: 280). As the political fluctuations of early 19th century northern India shifted in favor of the British East India Company, the blank spaces on the existing maps increasingly overlapped with the Company’s growing political possessions. This physical and political expansion resulted in a burst of Himalayan exploration in the first half of the 19th century and the subsequent publication of a number of travelogues and official reports. In these texts, environment and its practical uses, as John MacKenzie (1986, 1988) has noted concerning the larger genre of British travel narratives, figures prominently. Reflecting a growing interest in natural history that would peak in the latter half of the 19th century, many accounts of the Himalaya by explorers, surveyors, soldiers, hunters, or missionaries, included descriptions of and allusions to the environment.⁸ The findings of this growing network of scholars, policy makers, military officers, and amateur adventurers were increasingly being collected and published in the pages of the Royal Geographical Society’s *Journal* and associated publications. More often than not this “science” was for the practical benefit of the empire. The application of

advanced and varied surveying techniques, in particular, led to the spatial codification of the Himalaya by the Survey of India’s “Great Trigonometric Survey” in the 1860s and 1870s.

The British East India Company first came into formal contact with the broader Himalayan region in 1774 when Warren Hastings speculated on the significance of the Himalayan region for India’s defense and for the expansion of British trade (with Tibet and, through it, China) (Teltscher 2007: 49-50). That year he sent George Bogle to Bhutan and Tibet (which Hastings initially believed to be one state) in a first attempt to establish trans-Himalayan diplomatic and commercial relations. A few Western travellers had gone into the Himalayan regions prior to this.⁹ It was only with the Anglo-Nepalese War (1814-1815) and the territorial concessions that followed, however, that the British were brought into direct contact with the western Himalayan region. This contact, however, was gradual and (to use Aniket Alam’s phrase) “non-cataclysmic”; the regions’ terrain made the application of standard British administrative practices difficult to consistently and quickly implement. Instead, the British brought this region of diverse polities and diffused populations under a single administrator (the Superintendent of Hill States)—a slow and uneven process that reflected an early view of the region as non-essential.

The seventy-five years following Bogle’s mission witnessed a substantial consolidation of many of the states in the northwestern Himalaya by a series of regional imperial hopefuls: beginning with the Gurkha rulers of Nepal, followed by the Sikh Empire (1799-1849) of Maharaja Ranjit Singh, and ending with the Dogra Maharaja Gulab Singh of Kashmir and Jammu and his successors ruling under British suzerainty. By the end of the Second Anglo-Sikh war (1848-9), the British directly administered a number of districts throughout the region, while allowing others to continue as indirectly ruled princely states.

In 1768, the Gurkha leader Prithvi Narayan Shah unified the diverse ethnic groups of much of the central Himalayan region into the kingdom of Nepal. When Chinese forces defeated them in 1792, they turned their attention westward and by 1804 had conquered all the hill states between Nepal and the Sutlej River (Ray 1986: 194). In 1806, Gurkha forces crossed the Sutlej and defeated the raja of Kangra. In desperation, Kangra’s ruler sought assistance from the Sikh Maharaja, Ranjit Singh. In May 1809, Ranjit Singh sent forces to Kangra and pushed the Gurkhas across the Sutlej and subsequently made himself suzerain of that hill state and several others.

Following 1803, when the EIC took the Delhi territories, the Calcutta-based Company's attention gradually turned northward, sending their first official expedition to gather information about the territories under Gurkha rule in 1808. "This expedition was sponsored by the Asiatic Society of Bengal and was ostensibly meant to explore the areas watered by the river Ganges" (Alam 2008: 99-102). According to Aniket Alam, the published report of the expedition indicates that another goal was to gather information about the region's economy (specifically the trade with the region known as Chinese Turkestan), its socio-political condition, and the nature of Gurkha administration.¹⁰ The report contains detailed references to the internal organization of the Gurkha rulers in this region, the nature of agricultural production, natural resources, and physical conditions.

In 1818, the British sent a team under Alexander Gerard to explore the Sutlej and the possibility of trade across the mountains. This team eventually crossed into western Tibet along the route that would later become the Hindustan-Tibet Road.¹¹ By the 1820s, British media reported sporadic accounts of western Himalayan commercial goods arriving in British-held towns (particularly Rampur, in Bashahr) along this route.¹² Slowly, the British began perceiving the pre-existing trade routes and commercial potential of the region.

By the late 19th and early 20th century, historians of British India would provide a number of consistent explanations for this early British regional interest, all of which focused on the insecurity posed by neighboring states. Vincent Smith's views on the Himalayan frontier combined the central problem of security of British rule with the need for maintaining British prestige. Smith, ironically, defended the British annexation of the southern regions of the western Himalaya on the ground that the Nepalis had appeared as the unwelcome conquerors—"oriental despots," as so many Asian dynasties were termed—and the memory of their harshness was still alive among local populations (Smith 1928).

Sir John Foster George Ross-of-Bladenburg, the biographer of Lord Hastings, similarly viewed the Himalayan frontier primarily from the perspective of defense. Discussing the effect of the Anglo-Nepalese War on the British, he observed, "it defined relations with Nepal—all danger for the Northern frontier removed for ever" (Ross-of-Bladenburg 1893: 63, 82). With the exception of Paul Roberts, few historians by the late 19th century made any reference to the possibility of utilizing Himalayan resources—or its position as a commercial conduit—for the

material benefit of British India (Roberts 1938). By the mid-20th century we find the dominant view of the region's history solidified in the work of Alastair Lamb. Writing primarily in the 1960s, 1970s, and 1980s, Lamb's work focused on the evolution of frontiers into international borders between regional powers. The minimizing of commercial concerns in recounting the northwestern Himalaya's 19th century history suggests that the security-based narrative that became preeminent by the beginning of the 20th century had occluded all other considerations as the dominant historical trope. However, as we will soon see with Moorcroft's travels, (and more significantly with the construction of the Hindustan-Tibet Road), the prospect of commercial gains in the western Himalaya was also prominent in the logic of expansion.

Meanwhile, Ladakh was in a state of political turmoil as the result of a series of weak kings. William Moorcroft reached Ladakh's capital in September 1820 while en route to Central Asia. His apparent project was to find more robust horse breeds to improve the EIC's stock. The first officially practicing veterinarian in the Company, Moorcroft was also tasked with exploring the possibilities of opening up the trans-Himalayan region to British commerce. Although distrusted and obstructed by the Ladakhi officials in Leh, after two years Moorcroft managed to make several friends.¹³ During his stay, Moorcroft wrote detailed letters to Calcutta, noting the commercial and strategic importance of the region. He suggested that British control would allow them to access the pashmina trade from western Tibet, in addition to the potentially large markets of Central Asia (Moorcroft and Trebeck 2005: 151-154).

In May 1821, Moorcroft signed a commercial agreement with Ladakh's rulers. Under the agreement, the EIC's merchants were "permitted to trade with Ladakh and through it with the Chinese and Western Turkestan" (Ray 1986: 198). His stay in Ladakh aroused the suspicions of Maharaja Ranjit Singh who sent envoys to Leh to look into Moorcroft's activities. Moorcroft openly replied to the envoys that if the rumors of a Sikh military force being assembled were true, the pashmina industry of Kashmir would be greatly hurt. Moorcroft's letter to the Sikh ruler was, according to Moorcroft, written to alarm him and avert any invasion of Ladakh until the Governor-General made a decision on whether to accept the Ladakhi ruler's apparent request for aid. Moorcroft's letter did not have the intended effect.

Ranjit Singh's agent in Delhi passed the letter on to the British Resident and demanded an explanation. In response, the Governor-General wrote to the maharaja

explaining that Moorcroft had acted on his own and that the offer from Ladakh was rejected.

In 1834, Zorawar Singh, a general of the Dogra Raja of Jammu, Gulab Singh, invaded Ladakh. Over the following years he slowly pressed on towards Tibet in an attempt to further consolidate control over the trade routes and subdue a resisting Ladakhi populace (Pandit 1970; Charak 1977: 206-233). However, as he was marching towards Lhasa his supply lines became stretched during a severe winter and he was forced to retreat to Ladakh.¹⁴ On the return, however, he managed to capture Lahaul and Spiti, ensuring that Ladakh—if not western Tibet—would stay firmly within Dogra control.¹⁵

A decade later, the Sikhs crossed the Sutlej—the boundary marker between Sikh and British territories—starting what became known as the First Anglo-Sikh War (1845-46) (Farwell 1972: 37-8). In March 1846, after a British victory, Ranjit Singh's successor signed the Treaty of Amritsar. Under the treaty, Gulab Singh, the Dogra ruler of the suzerain state of Jammu,¹⁶ was appointed the Maharaja of Jammu, Kashmir, Ladakh, Baltistan, and Hazara. In exchange for this title, he recognized the supremacy of the British and agreed to a joint frontier commission to officially establish his state's borders. He also agreed to pay the British an annual tribute of “one horse, twelve perfect shawl goats of approved breed [...] and three pair of Kashmir shawls” (Drew 1875: 547).

By the late 1840s we find official reports detailing the western Himalaya's commercial assets, the disposition of its inhabitants, and suggestions for further exploration. In addition to pashmina, “in [the western parts of] this region there are magnificent forests of timber-trees; fruit trees and hedgerows are everywhere abundant” (United Kingdom, House of Commons 1854: 120-22). Only two decades after Lloyd optimistically “discovered” the vaguely described “ready materials for another world,” that world had been annexed and soon would be classified, quantified, and made usable by the region's newly hegemonic power. More importantly, because of the apparent security achieved by their expansion to the “natural” limits of northern India, the British would soon begin making use of their new territory in a variety of non-military ways.

Trade, Servitude, and the Hindustan-Tibet Road

Unlike the tumultuous events taking place at the northwestern edges of British India, the 1846 settlement of Britain's relations with the Princely State of Jammu and Kashmir made the still vaguely defined northwestern Himalaya one of the most stable portions of the imperial

perimeter. Sparsely populated and naturally enclosed by some of the world's highest peaks, the northwestern Himalaya could be leisurely explored, lightly administered, and easily defended. This stability convinced the Earl of Dalhousie (Governor-General, 1847-1856), who himself had begun to regularly visit the northwestern Himalaya (his favorite retreat was Kalpa in Kinnaur—then known as Chini), to explore the possibility of establishing trade roads through the mountains, in part to access the primary object of commercial interest: pashmina.

Properly speaking, pashmina is the material woven from pashm, the downy undercoat of the Tibetan goat (*changra*: “north[ern] goat”). Janet Rizvi estimates that in 1823, “the annual turnover of the industry at first price (before the addition of taxes, manufacturers' and middlemen's profits, brokers' fees, and transport costs) was estimated at some Rs30 lakh, amounting perhaps in today's money to Rs120 crore [roughly US\$25 million]” (Rizvi and Ahmed 2009: 13-14, 18). Its value reflects the vast distances and variety of groups long involved in this trans-Himalayan trade. Originating high up on the Tibetan Plateau in the goat herds of the semi-nomadic *Changpa*, the combed pashm was traded annually to Ladakhi or Kashmiri middlemen, who in turn sold the wool to Kashmiri merchants who, in turn, sold it to the great shawl-weaving houses of the Kashmir valley. Eighteenth-century European traders ‘discovered’ Kashmiri shawls, which were marked by a characteristic woven design, a teardrop with a bent tip (Zutshi 2009). This design inspired one of the most often-repeated Western textile motifs, commonly known today as “paisley.”

The presence of Muslim traders living in the predominantly Buddhist region of eastern Ladakh, as well as in Lhasa,¹⁷ further illustrates the deeply entrenched role played by the pashmina trade throughout the trans-Himalaya. These trade routes were reinforced by the long-established connections between the Buddhist centers of Tibet and the predominantly Tibetan Buddhist regions of the western Himalaya. The reciprocal flows of pilgrims, religious students, and traders ensured a well-worn series of routes with regular villages along the way to provide lodging, food, and fresh supplies of ponies, yaks, or donkeys. Regular pilgrimages to Mount Kailash in western Tibet also contributed to a steady stream of traffic.

The British, like the Sikhs before them, wanted to access these trade routes and the potentially lucrative materials flowing along them. The single major British undertaking to accomplish this was the construction of the Hindustan-Tibet Road, from the plains up to Simla,

and then northeastward to Kinnaur, with a branch leading up through Spiti and Lahaul and another earlier branch from Dugshai to Ladakh. This project, begun in the spring of 1850, utilized hundreds of thousands of laborers in the course of its five-year construction (United Kingdom House of Commons 1857). More than sixty percent of the labor used was unpaid, furnished by the individual hill states as part of an agreement to offer indentured service (known as *begar*) to their suzerain rulers.

The initial justifications for such an undertaking were three-fold:

First, the road could, over time, open up a commercial route to Tibet that would give the British dependable access to pashm, the raw material for pashmina ‘cashmere’ which was increasingly being demanded by the Victorian British upper classes. Early in 1850 the Earl of Dalhousie wrote that, “this road had been mentioned to me before as being of great importance with reference to the large trade which it is believed might be attracted to the plains of India from the countries beyond the Himalayan range” (United Kingdom, House of Commons 1857: 4).

Second, the widening of the first stages of the road would quickly help ease the difficulties of a growing number of British tourists visiting the hills and their burgeoning “sanatoria.”

Third, they wished to abolish the *begar* system of indentured servitude, which in the tradition of ironic logics of rule in South Asia, they themselves had exploited. Historically, as John Bray (2008) has shown, forms of obligatory labor—most commonly referred to by the generic Persian/Urdu term *begar*—had long been present in the Himalayan hill states, Ladakh, Kashmir, and Tibet. This *corvée* labor had been used in road construction in the region at least as far back as the 16th century (Bray 2008: 46). For the British, however, the system of local semi-

feudal obligations between hill chiefs and their peasantry offered a cheap and convenient means of travel in regions where “commercial transport and boarding houses economically unattractive” (Guha 2000: 25). In particular, *begar* allowed for transport to and around the growing number of hill stations, which the British were building in the foothills of the Himalaya. “As embodied in their settlement agreements,” Guha notes, “landholders were required to provide, for all government officials on tour and for white travellers (e.g. shikaris and mountaineers), several distinct sets of services.” These included laborers for carrying loads and building temporary rest huts, as well as provisions. According to the papers on the Hindustan-Tibet Road’s construction, the use of these indentured laborers appears to have been most widespread on the initial segment of the road, running from the plains at Kalka to Simla, and in the general vicinity of Simla. As such, the alleviation of *begar* may have been the most immediate reason for expanding the existing rough road between the plains and Simla, but it was not deemed a major factor in constructing most of the road, which extended beyond Simla along the Sutlej and into the mountains towards the Tibetan Plateau.

The system of *begar* was increasingly criticized by the late 1840s, and we find Dalhousie writing in 1850:

My first experience of the system, when my camp came to Simla in April 1849, satisfied me that it was a great and crying evil, and I have since that time both seen and heard much that has not only confirmed my conviction of the reality of the oppression, but has determined me to omit no effort to effect its removal. [...] The first step towards this end is the formation of a road from Simla to the plains at Kalka, capable of being easily and safely travelled by baggage animals [United Kingdom, House of Commons 1857: 3].

Table 1: Indentured labor expectations from certain Himalayan Hill States, 1852

(United Kingdom, House of Commons 1857:39)

STATE.	Population.	Quotas demanded for Road.	STATE.	Population.	Quotas demanded for Road.
Bussahir - - - -	150,000	500	Koomarhsen - - - -	12,000	200
Bagul - - - -	40,000	50	Konyar - - - -	2,500	10
Bujjee - - - -	25,000	60	Kothar - - - -	4,000	20
Burrowlee and Bughat - - - -	5,000	100	Kotkai - - - -	5,000	100
Bulsun - - - -	5,000	50	Maugul - - - -	1,000	40
Dhamie - - - -	3,000	20	Mylog - - - -	13,000	400
Hindoor - - - -	50,000	200	Puttecalla - - - -	40,000	400
Joobal - - - -	15,000	200	Sirmoor - - - -	77,000	300
Kyloor - - - -	50,000	200	Turroch - - - -	3,000	50
Keunthul - - - -	14,000	250			

† The population of which were equally interested with that of the others in effecting the abolition of “begar.”

The papers concerning the construction of the Hindustan-Tibet Road—compiled into a single Parliamentary Report presented to the House of Commons in 1857—detail the technological and physical struggles to master the rivers, mountains, and passes of this terrain. The British attempt to physically intervene in this challenging landscape represented a substantial financial investment and an ambitious and laborious undertaking. Regarding the determination of the exact route of the road, one superintendent of the project wrote:

It...appears beyond a doubt that the best line between Thibet and Hindostan, whether in a commercial, mathematical, or political point of view, is one from the uplands of Chang Tang through Bassahir and Simlah to the plains near Kalka. Here and here only has the awful barrier of the Himalayahs been pierced and its ramifications threaded by the waters of the Sutluj, so that passes of great elevation do not present themselves, and the mathematical correctness of the line is not impaired. This is the line that has been adopted for the Hindostan and Thibet Road... When completed, the keen reproach uttered by Moorcroft thirty-five years ago, will have lost its point and applicability [United Kingdom, House of Commons 1857: 73].¹⁸

Major J.P. Kennedy, the first superintendent in charge of overseeing the road's construction, wrote regarding the process of planning the road:

The obviously correct mathematical line for a road passing from the plains northward through the Hill States, offering at once a commercial communication with Central Asia through the Hill States, and an approach to our several sanitary stations, was indicated by the course of the rivers Jumna, with some of its tributaries, and the Sutlej [United Kingdom, House of Commons 1857: 6-7].

Initially the project employed an average of 3,000 laborers daily. This number steadily increased. The irregular arrival of conscripted labor proved to be a continual problem for the overseers. One superintendent exasperatedly wrote in 1851: "When at last the numbers were down to so low an ebb that the native chiefs (threatened by the Superintendent of the Hill States) became alarmed, a large influx of wild hill-men was poured upon the road, a sufficiency of tools was wanting for so great an increase, and could not be procured at a moment's warning; the mass was utterly ignorant of the work required of them" (United Kingdom, House of Commons 1857: 32). The lack of consistent labor and the apparent failure of the local

chiefs to provide food and shelter for their own finally forced the road's superintendents to pay more of their laborers a bare minimum wage. This increased cost resulted in a reduced expenditure on the construction of routes deemed to be of less immediate importance. The road from Simla to Ladakh, was considered one such route. This route, wrote Dalhousie, "intended to open up the commerce of central Asia with Hindustan, is of importance also, but its completion is of less immediate consequence" (United Kingdom, House of Commons 1857: 12). Enhancing access to the growing British sanatoria of the hills quickly became the principal short-term consideration of the road builders.

The project faced continued challenges for the next five years. Delays resulted in the experimental utilization of heavy quantities of gunpowder to demolish boulders that were impeding the road's course. Similar technologies designed for military use were employed in surveying. In a letter to the Governor-General's staff from a chief engineer, for example, the author notes that, "a gunner's quadrant was used by the overseer" (United Kingdom, House of Commons 1857: 31).

Lieutenant Briggs, in his report to the Governor-General at the end of the 1852 working season, elaborated on the discovery of several local mines by describing the improved tools he was able to fashion from them.

The proximity of these mines to the road may at a future period render the establishment of a foundry worthy of the consideration of Government. As an experiment I last year made up some entrenching tools of this metal, at a cost of 50 per cent less than the price of the same description of tools sent from England. I issued them along with others of European manufacture to the working parties, and found they stood the 'wear and tear' better than the latter [United Kingdom, House of Commons 1857: 43].

While the latter portion of the Hindustan and Tibet Road's proposed route was surrounded by barren land, Lieutenant Briggs suggested that certain areas immediately surrounding the road could be planted with deodar, "thus in 20 years...the Government will be in possession of the finest timber in India" (United Kingdom, House of Commons 1857: 44). This potentially innovative solution to replenishing and expanding timber supplies depleted as a result of high demand for temporary bridges, workers lodgings, and cooking fuel never came to fruition. However, other regions of the Himalaya became heavily

utilized timber sources, particularly from the 1860s onwards (Guha 2000).

Throughout the documents relating to the road's construction there is scant mention of the working conditions of the people who built it. One temporary superintendent, however, revealingly wrote that, "[t]he road coolies unquestionably suffer, and are mulet [i.e. mules] in every possible way, though this would be denied, and stoutly, and which is my firm belief, makes the coolies detest every one and every thing connected with the road" (United Kingdom, House of Commons 1857: 60).

Another brief glimpse of the terrible conditions under which the road's builders toiled occurred on a segment of the road that required a tunnel, which employed roughly 10,000 prisoners a day. "Not the least remarkable circumstance connected with this work is, that it was constructed almost entirely by prisoners, and without a single accident. The night reliefs were alone composed of free labourers, and a few of the same class during the day, assisted the convicts in wheeling barrows, and in such work as their chains rendered irksome" (United Kingdom, House of Commons 1857: 47). These remarks reflect the sheer coercion and pain involved in much of the road's construction.

By 1855, Lieutenant Briggs optimistically looked beyond the commercial value of the road, suggesting, instead that in the lower elevations there might one day be a colony of British retirees whose families will form the basis of a growing and "acclimated" army.

It has been stated by some, that the annual repairs of this road will be enormous. [...] As traffic increases, it will probably be necessary to metal certain portions of the line, but it is to be supposed that the increased traffic will afford increased income. But far above and beyond these considerations, is the opening out of the fertile vallies of these mountains to future European colonists. [...] All, and far more than the early colonists of America ever promised themselves, is to be found here, where under the blessings of a mild and paternal government, the colonist might increase his store, as fully assured of safety to life and property, as if the scene were in the heart of Great Britain, instead of under the shadows of the mighty Himalayahs. Instead of permitting the old worn-out European pensioner to idle away all that is left to him of life, under the scorching sun of Chunar, it might be worthy the attention of

government to give him a cottage and a spot that he might call his own within some of these elevated vallies; where, with something to occupy his time, he might, under proper superintendence, lay the foundations of an European colony; the youth of which, educated to a military life...might furnish our Indian army with recruits as strong, and better educated and acclimated, than the mother country does produce [United Kingdom, House of Commons 1857: 80-1].

Briggs' optimism here highlights the perception of the region as a secure space in which British pensioners and children might flourish, far away from any perceived threats or, indeed, from any boundary that requires defending.

Responding to an earlier report by Briggs, Dalhousie triumphantly wrote:

The whole thing was experimental. People scoffed at the idea of being able to form a level road through these enormous mountains at all. No estimate could be formed of the expense, for no data existed by which to calculate it. Any reference to the Military Board would have been useless for this reason. I, therefore, took upon myself the responsibility of ordering its construction at once, directly under my own authority. I venture to think that the experiment has been eminently successful [United Kingdom, House of Commons 1857: 54].

The Governor-General's tone here suggests that the project, or the technical challenge of it, may have been its own end. The road's construction illustrated—to some at least—that one of the most challenging landscapes on earth could be "tamed."

The massive undertaking of the road's construction required a vast array of labor, a detailed accounting of the progress made and the quantities of earth moved, and the technological processes involved in surveying, constructing, and recording the project. Following 1857—or the loss of Dalhousie's patronage—it appears that the British Government of India lost interest in the commercial application of the road.

The failure of the project to produce any significant commercial results, however, signaled British reluctance to continue opening up routes into the region. By the 1870s, we find references to the road being occasionally used by a growing number of hunters, tourists, geologists, and botanists, but rarely by traders. One commentator in

the *Pall Mall Gazette* reviewing Major T. C. Montgomerie's "Routes in the Western Himalaya, Kashmir, &c," speculated that:

No attempt has been made to continue "the great Hindustan and Tibet road" past Pangay to the frontier of Chinese Tartary, and we understand the Indian Government has no intention of expending money on any such continuation at present. The Government has been blamed for not doing so on the alleged ground that without the completion of this road to the Chinese border the part which has been made is useless for the purpose of developing traffic; but the traffic on that line must always be very limited, and it was really rather for military than commercial purposes that the road was constructed as far as Pangay. [*The Pall Mall Gazette*, 15 July 1874]

This last statement is intriguing. In the hundreds of pages of documents concerned with the road's construction—and in Dalhousie's own published *Private Papers*—the overarching reasons given for its construction are always trade, access to hill stations, and the dubious alleviation of the *begar* system (Baird 1910). This anonymous reviewer's insistence on the primacy of a military rationale behind the road's construction suggests that by the time of his writing the frontier region was already being conceived of primarily as an instrument of imperial security. Instead of a conduit for trade it became viewed as a tool for defense of the empire. The questionable strategic value of the road's location, however, casts doubt on whether such an undertaking would ever be financed without an anticipated revenue source.

Furthermore, in all of the Parliamentary papers concerning the road's construction and in Dalhousie's own published writings there is no mention of stationing troops along its path beyond Simla or the construction of any garrison beyond those temporary structures built to house EIC officers involved in the project. Dalhousie was not a Governor-General who shied away from military projects and their justifications. Besides being known for his ruthless expansion of British possessions in South Asia (through conquest and his infamous Doctrine of Lapse), Dalhousie left behind him a tremendous series of public work projects (roads, telegraph lines, irrigation systems, and the beginnings of a railway system). But again, he never articulates a connection between the Hindustan-Tibet Road and his broader infrastructural projects. Perhaps, then, the road was primarily a pet project of his—simply an "experiment," as he frequently described it, one with the possible addition of added revenue from trade

in pashmina and an easy conduit for travelers seeking outdoor adventure. Or perhaps it was built—like many a monument—to symbolize territorial dominance and the challenge of the undertaking.

That the road was a commercial failure, however, seems less debatable. There would be only one other bold British commercial undertaking in the northwestern Himalaya, that of the short-lived Central Asian Trading Company. This low-budget project, begun in the 1870s, attracted significant press coverage but failed in its objective of opening up the markets of Yarkand and Kashgar in Chinese Turkestan. Its most durable effect, perhaps, was the contribution to a growing pantheon of heroic imperial martyrs. While returning from Yarkand, a young Scot, Andrew Dalgliesh, was killed on the Karakoram Pass allegedly by an Afghan named Daud Mohammad.¹⁹ John Buchan would later embellish Dalgliesh's story in *A Book of Escapes and Hurried Journeys*.

Other Avenues

While establishing regional hegemony and the less certain prospects of trade had been central reasons for the assertion of British control over the northwestern Himalaya, these were not the only reasons why the British increasingly ventured into the mountainous periphery of their domain. The Hindustan-Tibet Road was also, in Simla district, a conduit to a number of growing hill stations. As Pamela Kanwar and Dane Kennedy have persuasively shown, the lure of the mountains as retreats from the plains drew more and more British to the mountains in the mid-19th century (Kanwar 1990: 32-33).²⁰ These towns could function for the British as retreats from the plains and as a nostalgia inducing *chhota vilayat* ("little England"). Pamela Kanwar has aptly styled these hill stations as "imperial refuge[s]". Early British recollections of Simla consistently play with the theme of familiarity to England. "It reminded me of home, the days of my boyhood, my mother and the happiest of varied recollections," wrote William Lloyd of Simla in 1821 (Lloyd 1840: 141). The northwestern Himalaya could also, in its higher elevations, provide exciting exploration potential for vacationing Britons in the form of hunting, walking, or amateur scientific pursuits.

While trade continued via local intermediaries in Kashmir, Ladakh, Spiti, Bashahr, Kullu and Lahaul, the bulk of British commercial activity in the broader region came to rest with the British Joint-Commissioners stationed at Leh beginning in the late 1860s. The commissioner was tasked with recording the volume of trade passing through Ladakh to and from the indirectly-governed princely state

of Kashmir and Jammu to the west, and to and from the directly- and indirectly-governed districts to the south. He also monitored any and all information coming from the north. By the 1870s, the British increasingly viewed the region as a geo-strategic boundary, one that would function primarily as a barrier to threats from Russia and Central Asia. This shift was facilitated in part by the escalation of security concerns brought on by the rebellion of 1857 and the threat of a growing Russian presence in Central Asia. But the inclusion of the northwestern Himalaya in this increasingly unified frontier was itself the result of a shift in 'frontier' thinking that came about through the epistemological and scientific mastery of the empire's peripheral spaces, most prominently illustrated by the Survey of India's "grand trigonometrical survey."²¹

The Survey drew upon the practical knowledge amassed during nearly a century of engineering and mapping projects that had been crisscrossing the less inaccessible parts of the subcontinent for nearly 80 years. In the Himalaya and Central Asia, the Survey developed new techniques of knowledge gathering that relied on technical innovations to mechanical instruments and, more importantly, the training of indigenous (or semi-indigenous) "Pundits" as "intelligent instrument[s] of measure" (Raj 2007: 183). The projects in the region became covert, knowledge gathering exercises that relied on intermediaries in lieu of the broader avenues of infrastructural improvement and direct rule. Kapil Raj has shown that "[n]ovel survey methods had at times to be forged for terrains and circumstances that precluded the use of standard techniques." Yet the knowledge produced out of these various surveying projects—diverse in their locations and practical particulars—could be configured as standardized applied scientific procedures and utilized universally. These technological processes increasingly became linked to security concerns.

Conclusions

When the political reconfigurations of the early 19th century settled, the British found themselves with a solid segment of the Himalayan region in their possession. The varieties of configurations that the space accommodated—as a commercial conduit, as a retreat from the plains, and as an amateur laboratory for emerging sciences—produced an array of uses for an apparently secure frontier. Furthermore, the construction of the Hindustan-Tibet Road itself involved *technoterritorialization*, that is, "engineering land *into the state* in a way that extends, through particularizing scientific practices, the depth and reach of state power" (Carroll 2006: 171).

The security of this frontier, once technologically integrated into a cartographically unified space, was increasingly doubted by an anxious imperial regime after 1857. The "forward" policies that would emerge in the last decades of the 19th century made such physical frontiers part of an imperial security complex that would require 'buffer states' and neutralized spaces beyond the imperial domains. As Alfred Lyall wrote in 1891:

...[O]ur political influence radiates out beyond the line of our actual possession, spreading its skirts widely and loosely over the adjacent country.... [T]he true frontier of the British dominion in Asia, the line which we are more or less pledged to guard, from which we have warned off trespassers, does not by any means tally with the outer edge of the immense territory over which we exercise administrative jurisdiction, in which all the people are British subjects for whom our governments make laws. [Lyall 1891: 313-14]

It was this reconfiguring of frontier space driven by increasingly hawkish Russophobia in the late 19th century that helped to convince Curzon to invade Tibet in 1903-4.

The period I have surveyed constituted an early phase in the establishment of British control in the northwestern Himalaya. A more detailed historical analysis of the region would be required in order to examine the administrative mechanisms through which this process was achieved. Furthermore, any comprehensive examination of this period must explore the responses to this process by the indigenous population, as well as by the many and varied foreign populations that long inhabited the region due to trade, religious routes, or prior imperial administration.²²

There is a bias described by social psychologists as "actor-observer asymmetry" which asserts that individuals tend to describe their motivations for actions in situational terms while tending to describe the motivations for the actions of others in dispositional terms. Without discounting the existence of a British colonial "disposition" towards territorial expansion and perennial security concerns, it is worth remembering the contingent and "situational" nature of particular historical episodes in the British encounter with South Asia. When confronted with a newly acquired and apparently pacific space at the edge of their growing South Asian empire, British administrators attempted to make use of it in a variety of ways. It would be naïve to assume that security concerns were not present in the minds of British administrators during the first half of the 19th century, particularly given the East India Company's nearly continual use of military force in

fulfilling its ostensibly commercial purpose. By the late 1840s, however, the northwestern Himalaya was perceived to be sufficiently secure so as to allow for a variety of experiments that would not be possible on British India's more contested frontiers. The building of the Hindustan-Tibet Road represents the most prominent case of this experimentation. It was built in part to access unknown commercial markets and expand the ease of access to the growing British retreats in the mountains, but also, as Dalhousie noted, because "people scoffed at the idea of being able to form a level road through these enormous mountains at all." In his estimation, "the experiment [was] eminently successful." Those of us who have had occasion to travel along that road may disagree.

Kyle Gardner (MA, History, University of Chicago, 2011) is a PhD student in International History at the University of Chicago. He earned his BA in History from Wesleyan University in 2006. His dissertation project, "The Frontier Complex: Environment, Technology, and Law in the Northwestern Himalaya," examines how and why British colonial practices and institutions along India's northwestern Himalayan frontier were shaped by the environmental, cultural, and political particulars of the region. He has studied (and continues to study) Tibetan, Urdu, and Ladakhi.

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Endnotes

1. Lloyd is referring to Simla. Its Romanized spellings have varied over time, most recently settling on "Shimla," which more accurately reflects its namesake, the Hindu goddess Shyamala Devi. For this paper I have used the dominant form found in the British sources, "Simla."
2. Aniket Alam makes a similar conclusion in the preface to his survey of the western Himalaya under British rule (Alam 2008).
3. The British administrators whose papers I have examined understood the region to be part of China, or "Chinese Tartary" and were aware of the existence of nearby trade routes running from central Tibet towards "Chinese Turkestan" and Ladakh, largely as a result of the explorations of Moorcroft, Trebeck, Gerard, Lloyd, and others.
4. From the 1790s till Younghusband's invasion in 1903-4, successive Tibetan governments in Lhasa would actively work to prevent incursions along their southern and western borders. This isolation became a political issue for the British once their own Himalayan borders became more technically defined in the latter half of the 19th century and they perceived it to be diplomatically and militarily necessary to establish diplomatic relations with Lhasa. During the time period discussed in this paper the British were aware of Tibet's political isolation but had little information about the region that lay beyond the northwestern Himalaya. See Lamb (1986). The papers concerning the construction of the Hindustan-Tibet Road suggest that by 1850 British administrators still had little understanding of the territory that lay beyond their newly acquired northwestern Himalayan lands. However, as Lamb notes, "since 1792 the Chinese seem to have been...fully aware of the growing British power south of the Himalayas." (1986: 49). It is clear that information

was moving much more clearly on the Tibetan/Chinese side of the Himalaya where reports of Moorcroft's travels induced Lhasa to communicate to its frontier guards that no Europeans were to be admitted.

5. Lieutenant David Briggs, supervisor of much of the Hindustan-Tibet Road's construction, cites William Moorcroft's unheeded warning (circa 1820), that "whether [Tibetans and Central Asians] shall be clothed with the broadcloth of Russia or of England...with hardware of every description from Petersburg [i.e. St. Petersburg] or Birmingham, is entirely in the decision of the Government of British India. At present there is little doubt to which the prize will be awarded, for enterprise and vigour mark the measure of Russia towards the nations of Central Asia, whilst ours are characterised by misplaced squeamishness and unnecessary timidity" (United Kingdom, House of Commons 1857: 73).

6. Foremost among these scholars is Alastair Lamb. Throughout his many published volumes he details British policies and the political antagonisms that produced the frontiers and borders of the greater Himalayan region: Lamb (1960, 1964, 1966, 1968, 1973, 1986). See also McKay (2003). McKay argues that the Younghusband mission of 1903-4 was the culmination of a policy of British frontier expansion that began in the latter half of the 18th century and was accelerated by the "forward school" in the late 19th century.

7. The term is Patrick Carroll's. He writes: "I use the term *technoterritoriality* to emphasize the theoretical point that the issue of territory, in the context of the modern state, is only partly captured by reference to coercive or sovereign dominion within a landmass (which can include territorial waters, islands, and colonies). Modern territoriality involves engineering land *into the state* in a way that extends, through particularizing scientific practices, the depth and reach of state power" (Carroll 2006: 171).

8. A list of such texts would include the travel narratives of Lloyd and Gerard (1840), Moorcroft and Trebeck (1841), Vigne (1844), Thomson (1852), Hooker (1854), and Cunningham (1854).

9. For an example of such writings, see Desideri (1937).

10. To the best of my knowledge, this report is only available in the archives of the Foreign Department, Secret Branch, National Archives of India. This material is thus drawn from Aniket Alam's reading of this archive.

11. Alam (2008), citing Herbert (1819) and Gerard (n.d.).

12. Cf. *Calcutta Gazette* (13 March 1828) and *The Morning Chronicle* (London) (22 September 1828), which detail the arrival of Ladakhi grain in the Punjab.

13. Including the peripatetic Hungarian linguist, Sándor Kőrösi Csoma, who Moorcroft convinced to write the first English-Tibetan dictionary.

14. *The Examiner* (London), 12 February 1842: "Thibet: it at one time appeared probable that Zorawar Sing would succeed in wresting from the Chinese some portion of their Thibetian territory. Our celestial friends, however, have now entered the field against the enemy; and the Seikh forces have given way, and are retreating on Ladakh, quite discomfited."

15. For an account of this period in Urdu, see Pandit (1970).

16. Gulab Singh had earlier helped the British against the Sikhs.

17. Known in Tibetan and Ladakhi as the "Lhasa Ka-che." According to Professor Karma Ngondup, "Ka-che" is likely a corruption of the Tibetan "khashi" (i.e. Kashmir).

18. For Moorcroft's "reproach," see note 5.

19. See Gill (2000) and Rizvi (1999).

20. See also Kennedy (1996).

21. For the history of this process from its inception through the mid-19th century, see Matthew Edney's seminal work, Edney (1997); for its gradual imbrication within the larger security state of British India in the latter half of the 19th century, see Raj (2007).

22. For an example of such work see Moran (2007).

References

- Alam, Aniket. 2008. *Becoming India: Western Himalayas under British Rule*. Delhi: Foundation Books.
- Baird, J.G.A. 1910. *Private Letters of the Marquess of Dalhousie*. Edinburgh and London: W. Blackwood and Sons.
- Bayly, C.A. 1996. *Empire and Information: Intelligence Gathering and Social Communication in India, 1780-1870*. Cambridge: Cambridge University Press.
- Bray, John. 2008. Corvée Transport Labour in 19th and early 20th Century Ladakh: A Study in Continuity and Change. In *Modern Ladakh: Anthropological Perspectives on Continuity and Change*. Martijn van Beek and Fernanda Pirie, eds. 43-66. Brill's Tibetan Studies Library 20. Leiden: Brill Academic Publishers.
- Carroll, Patrick. 2006. *Science, Culture and Modern State Formation*. Berkeley and Los Angeles: University of California Press.
- Charak, Sukhdev Singh. 1977. *Gulabnama of Diwan Kirpa Ram: A History of Maharaja Gulab Singh of Jammu and Kashmir*. New Delhi: Light and Life Publishers.

- Cunningham, Sir Alexander. 1854. *Ladak, Physical, Statistical, and Historical: With Notices of the Surrounding Countries*. London: W.H. Allen and Co.
- Desideri, Ippolito. 1937. *An Account of Tibet. The Travels of Ippolito Desideri of Pistoia, S.J., 1712-1727*. Filippo de Filippi, ed. London: George Routledge & Sons, Ltd.
- Drew, Frederic. 1875. *The Jammu and Kashmir Territories*. London: Edward Stanford.
- Edney, Matthew H. 1997. *Mapping an Empire: The Geographical Construction of British India, 1765-1843*. Chicago: University of Chicago Press.
- Farwell, Byron. 1972. *Queen Victoria's Little Wars*. New York: Harper & Row.
- Gerard, Lieutenant Alexander. n.d. Narrative of a Journey from Soobathoo to Shipke, in Chinese Tartary. *Journal of the Asiatic Society* (41): 363-391.
- Gill, Dr Bir Good. 2000. The Venture of the Central Asian Trading Company in Eastern Turkistan, 1874-5. *Asian Affairs* 31(2).
- Guha, Ramachandra. 2000. *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*. Berkeley: University of California Press.
- Herbert, Captain J.D. 1819. An Account of a Tour Made to Lay Down the Course and Levels of the River Sutlej or Satudra, as Far as Traceable within the limits of the British Authority, Performed in 1819. *Asiatic Researches* 18: 227-58.
- Holdich, Thomas H. 1916. *Political Frontier and Boundary Making*. London: Macmillan and Co.
- Hooker, Joseph D. 1854. *Himalayan Journals: Notes of a Naturalist in Bengal, the Sikkim and Nepal Himalayas, the Khasia Mountains, & c.* 2 vols. London: J. Murray.
- Kanwar, Pamela. 1990. *Imperial Simla: The Political Culture of the Raj*. Delhi: Oxford University Press.
- Kennedy, Dane. 1996. *The Magic Mountains: Hill Stations and the British Raj*. Berkeley: University of California Press.
- Lamb, Alastair. 1960. *Britain and Chinese Central Asia*. London and New York: Routledge & Kegan Paul.
- . 1964. *The China-India Border: The Origins of the Disputed Boundaries*. London: Oxford University Press.
- . 1966. *The McMahon Line: A Study in the Relations between India, China and Tibet, 1904 to 1914*. 2 vols. London: Routledge & Kegan Paul.
- . 1968. *Asian Frontiers: Studies in a Continuing Problem*. New York, Washington, and London: Frederick A. Raeger.
- . 1973. *The Sino-Indian Border in Ladakh*. Canberra: Australian National University Press.
- . 1986. *British India and Tibet, 1766-1910*. London and New York: Routledge & Kegan Paul.
- Lloyd, Major Sir William and Alexander Gerard. 1840. *Narrative of a journey from Caunpoor to the Boorendo pass in the Himalaya Mountains viâ Gwalior, Agra, Delhi, and Sirhind and Captain Alexander Gerard's account of an attempt to penetrate by Bekhur to Garoo, and the Lake Manasarowara: with a letter from the late J. G. Gerard, esq. detailing a visit to the Shatool and Boorendo passes, for the purpose of determining the line of perpetual snow on the southern face of the Himalaya*. 2 Vols. London: J. Madden.
- Lyall, Sir Alfred. 1891. Frontiers and Protectorates. *Nineteenth Century: A Monthly Review* 30 (174): 312-328.
- . (1894) 1911. *The Rise and Expansion of the British Dominion in India*. London: John Murray.
- MacKenzie, John M. 1986. *Imperialism and Popular Culture*. Manchester: Manchester University Press.
- . 1988. *The Empire of Nature: Hunting, Conservation and Imperialism*. Manchester and New York: Manchester University Press.
- McKay, Alex. 2003. 19th Century British Expansion on the Indo-Tibetan Frontier: A Forward Perspective. *The Tibet Journal* 28 (4): 61-76.
- Montgomerie, T. C. 1872. Routes in the Western Himalaya, Kashmir, &c. Dehra Doon. Office of the Superintendent Great Trigonometrical Survey of India.
- Moorcroft, William and George Trebeck. (1841) 2005. *Travels in the Himalayan Provinces of Hindustan and the Panjab; in Ladakh and Kashmir; in Peshawar, Kabul, Kunduz, and Bokhara; from 1819 to 1825*. New Delhi: Munshiram Monoharlal Publishers.
- Moran, Arik. 2007. From Mountain Trade to Jungle Politics: The Transformation of Kingship in Bashahr, 1815-1914. *The Indian Economic and Social History Review* 44 (2): 147-177.
- Pandit, M. Amin. 1970. *Ladākh kī kahānī; Makhtaṣar tārikh Ladākh*. Srīnagar: Baḍshāh publishar.
- Raj, Kapil. 2007. *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900*. New York: Palgrave Macmillan.
- Ray, Nisith Ranjan. 1986. *Himalaya Frontier in Historical Perspective*. Calcutta: Institute of Historical Studies.

- Rizvi, Janet. 1999. *Trans-Himalayan Caravans: Merchant Princes and Peasant Traders in Ladakh*. New Delhi: Oxford University Press.
- Rizvi, Janet and Monisha Ahmed. 2009. *Pashmina: The Kashmir Shawl and Beyond*. Mumbai: Marg Publications.
- Roberts, Paul E. (1921) 1938. *History of British India under the Company and the Crown*. Oxford: Clarendon Press.
- Ross-of-Bladenburg, Sir J. F. G. 1893. *The Marquis of Hastings*, K. G. Oxford: Clarendon Press.
- Royal Geographical Society. 1831-1880. *The Journal of the Royal Geographical Society of London*. London: John Murray.
- Royal Geographical Society. 1856. *A Gazetteer of the World, or Dictionary of Geographical Knowledge, compiled from the most recent authorities, and forming a complete body of modern geography, physical, political, statistical, and ethnographical*. Edinburgh, London, and Dublin: A. Fullarton & Co. (Google book version, accessed March 2, 2012)
- Smith, Vincent Arthur. 1928. *The Oxford History of India: From the Earliest Times to the End of 1911*. Oxford: Clarendon Press.
- Teltscher, Kate. 2007. *The High Road to China: George Bogle, the Panchen Lama and the First British Expedition to Tibet*. London: Bloomsbury.
- Thomson, Thomas. (1852) 1978. *Western Himalayas and Tibet: A Narrative on Ladakh and Mountains of Northern India*. New Delhi: Cosmo Publications.
- United Kingdom, House of Commons. 1854. General report on the administration of the Punjab, for the years 1849-50 and 1850-51 being the two first years after annexation; with a supplementary notice of the Cis and Trans-Sutlej Territories. Sessional Papers.
- . 1857. Minutes and correspondence in reference to the project of the Hindostan and Thibet road, with reports of Major Kennedy and Lieutenant Briggs relating thereto; and, an account of the expenditure incurred in the construction of the new road between Kalha and Dugshai. Sessional Papers, 1857. East India (roads).
- Vigne, Godfrey. 1844. *Travels in Kashmir, Ladak, Iskardo, the Countries Adjoining the Mountain-Course of the Indus and the Himalaya, North of the Punjab*. London: H. Colburn.
- Zutshi, Chitralkha. 2009. Designed for Eternity: Kashmiri Shawls, Empire, and Cultures of Production and Consumption in Mid-Victorian Britain. *Journal of British Studies* 48 (2): 420-440.