THOMAS MONTGOMERIE AND THE TRANS-HIMALAYAN EXPLORERS OF THE SURVEY OF INDIA

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On a September day in 1863, a Moslem named Abdul Hamid entered the Central Asian city of Yarkand. Disguised as a merchant, Hamid was in reality an employee of the Survey of India, carrying concealed instruments to enable him to map the geography of the area. Unfortunately he did not live to provide a first-hand account of his travels. Still Hamid was the first of the Indian trans-Himalayan explorers--recruited, trained and directed by the officers of the Great Trigonometrical Survey of India-who were to cross much of Tibet and Central Asia during the next twenty years.

The use of these "native explorers"--a euphemism adopted by the Survey of India--or spies or agents, as they were referred to in the secret files of the government of British India, was sanctioned in the 1860s only after China closed the borders of Tibet to foreigners, the deaths of several European explorers in Central Asia, the unwillingness and inability of the Chinese authorities to make provision for British travellers, and after decades of reluctance by the government of India to allow technically qualified Indians to survey beyond the frontier.

1. British Concern with the Trans-Himalayan Region

The British came into contact with Tibet from the mid-eighteenth century onwards, as a result of their northward expansion in India toward the Himalayas. As they moved north, the British demanded precise frontiers, and sought orderly political and economic relationships with their neighbors. In the latter part of the century, Tibet was opened to the commercial representatives of the East India Company. The Company sent George Bogle there in 1774 and Samuel Turner in 1783. To Bogle, therefore, goes the honor of being the first Englishman to set foot in Tibet. Both men, however, reached only as far as Tashilunpo (near Shigatse), about 150 miles southwest of Lhasa. Tashilunpo was the seat of the Panchen Lama, second in both spiritual and temporal power to the Dalai Lama. Neither Bogle nor Turner succeeded in reaching Lhasa itself.

Shortly after the Turner mission, in 1788, the Gurkhas, having conquered Nepal and partly replaced Buddhism by Hinduism, invaded Tibet and were only expelled with the help of a substantial Chinese army. The Chinese Emperor Ch'ien Lung then closed the frontiers of Tibet to the outside world. The Tibetans agreed, angered by the lack of British assistance against the Gurkhas, and alarmed by the spread of British power along the foothills of the Himalayas, in regions where they had long been a major influence. The Chinese insinuated to the Tibetans that Britain had helped the Gurkhas, and, fearing for their own position, encouraged the Tibetans in their suspicions of the outside world, suggesting that the Europeans might wish to replace Buddhism with Christianity. This exclusionary policy was continued throughout the nineteenth century, so that apart from the eccentric British traveller Thomas Manning, who wandered into Lhasa in 1811, no Englishman (and few other Europeans) reached the city until the twentieth century and the Younghusband military expedition of 1904.¹ As a result, Manning was the first Englishman ever to see Lhasa, and the last for almost a hundred years.

In the case of Chinese (or Eastern) Turkestan, an area of about 400,000 square miles (now known as the Xinjiang Uygur Autonomous Region of China), the population was clustered around the three cities of Kashgar, Yarkand and Khotan. In the mid-nineteenth century, the positions of these major cities were not known with certainty. Marco Polo had passed through Yarkand in the late 13th century, followed by the Jesuit traveller, Bento de Goes, in 1603. Others had followed in more modern times, but all their accounts, together with some Chinese sources, did not add up to a great deal by the middle of the nineteenth century.

In the case of Tibet, very little was known of its geography, either. There was no certainty about the exact position of its capital, Lhasa, or the route of its major river the Tsangpo, and whether the Tsangpo emerged in India as the Brahmaputra or the Irrawaddy. The true source of Indus river in Tibet also was unknown, and the best available map of Tibet was one drawn up in 1717 on the basis of measurements taken by two lamas, trained as surveyors by Jesuits in Peking.

As the British consolidated their hold over the Indian subcontinent, so they became increasingly concerned about the lands beyond the mountain ranges to the north and northwest. Trade, of course, was a primary factor that demanded information about access routes, the nature of the climate and resources and the needs and disposition of the people toward trade. There were security considerations as well and military leaders wanted a good knowledge of the physical geography of the area, including villages, crops and mountain passes, that was clearly a pressing need with the Russian Empire expanding inexorably toward the frontiers of British India. This concern was felt particularly strongly by the surveyor-officers of the Great Trigonometrical Survey (GTS).

2. Montgomerie and the Great Trigonometrical Survey

The surveyors of the GTS, when working in remote parts, were expected not only to provide precise maps, but also to collect information on the peoples of the area, the nature of their livelihood, the available crops, and other details, military and commercial, which might be useful to the Government of India. Surveyors who had worked for years in distant places therefore became experienced intelligence agents on behalf of British rule in India. By the mid-nineteenth century the GTS, systematically mapping the whole of the sub-continent, had reached the Himalayas. One young surveyor-officer active in this area was Thomas George Montgomerie.

Montgomerie was born on 23 April 1830, the fourth son of a Colonel in the Ayrshire Yeomanry. After graduating head of his class and winning the medal for the most distinguished cadet from the East India Company's school at Addiscombe, he was gazetted Second Lieutenant in the Bengal Engineers, arriving in India at the age of 21. After a period working with the Fifth Company of the Sappers and Miners on the Hindustan-Tibet Road, he joined the GTS in 1852. For the next two years, he was active in the field, observing triangles and assisting in the measurement of the Chachbase line (near Attock). During this period, he must have come to the personal attention of the Surveyor General, who, in September 1854, announced his intention of placing the young Montgomerie, now promoted First Lieutenant, in charge of the Kashmir survey.

The Kashmir survey was completed in 1864, having surveyed an area of 7,700 square miles, including 1,400 square miles of glaciers, and at heights which no man had reached before without the aid of a balloon. Montgomerie's efforts won high praise from many quarters, including the Governor-General, the Secretary of State for India and the President of the Royal Geographical Society.

At the age of 35, Montgomerie's future in India was assured. But he was to be remembered in history not primarily for his mapping of Kashmir, but rather for his initiative and enterprise in the use of native explorers for the trans-Himalayan exploration of Tibet and Central Asia. Native explorers had to be used because of the geographical difficulties of the terrain, its political inaccessibility, and because of the hostility shown by the local people to European travellers.

It was indisuputably dangerous for Europeans to leave the protection of British-administered territory. The legendary William Moorcroft had been killed after leaving Bokhara in 1825, and the German explorer Adolf Schlagintweit was murdered near Kashgar in 1857. Others had met a similar fate. Major James Walker (later General Walker, Superintendent of the GTS) wrote while on survey near Peshawar, close to areas inhabited by the Afridis, that "to go into their country excepting by force is never possible for a European, and is at all times dangerous for a native."² The same was true of other areas in East and West Turkestan, areas often unvisited by European travellers, at least since the time of Marco Polo, and where the rule of law was arbitrary at best.

The Government of India was also anxious to avoid conflict between its citizens and peoples across the border, where hostile activities against British citizens could neither be defended nor avenged. Accordingly, the instructions to Montgomerie at the commencement of the Kashmir survey, although they stated that the survey should "obtain the means of rectifying our imperfect geographical knowledge of the regions beyond British influence," included the admonition that the survey was not "to risk the safety of the party nor to entangle Government in political complications."³ Similarly, while triangulating east from Leh in Ladakh, the surveyors were warned: "You must be careful to prevent all collision with the Chinese Tartars on the common boundary."⁴ Those who ignored these instructions earned the marked displeasure of the Government.

Montgomerie was no doubt aware that Indians had been employed by the British as explorers from time to time since the eighteenth century. The Government of India, however, generally discouraged the practice, by refusing to provide funds to native explorers. The Government did not want Indians to be taught surveying techniques, or to acquire geographical information about the country, especially the sensitive northern border areas. The use of Indian explorers therefore languished, except for their occasional use by enterprising individuals, for half a century, until the need to obtain geographical intelligence beyond the borders required a reconsideration of the policy.

In March 1861, Montgomerie submitted a report to the Punjab Government in which he expressed the hope that the conflict between Britain and China would eventually result in increased trade between India and Chinese Turkestan, and that the GTS would "succeed hereafter in fixing the geographical positions of some of the great cities of Central Asia."⁵ The methods by which this aim might be accomplished were not referred to at this time.

During the progress of the Kashmir survey, Montgomerie had given considerable thought to the ways in which geographical information might be acquired concerning those areas of Gilgit, the Pamirs, Chinese Turkestan, and Tibet which were blank on his maps. It was obvious to Montgomerie that normal surveying procedures were not applicable in these regions both because of the very uncertain welcome that the local population might extend toward Europeans, and because of the views of the Government of India concerning such explorations. Indian travellers, though, were a different matter. While on operations with the Kashmir Survey in Ladakh, Montgomerie had noticed that many Indians were able to cross the frontier freely between Ladakh and Yarkand. Montgomerie therefore conceived his momentous idea of forming a group of native travellers who would be trained to carry out simple surveying operations, using instruments concealed among their possessions, and who would cross the Indian frontiers disguised as pilgrims or traders.

The first available evidence showing that Montgomerie was moving to request official approval for his idea comes in a memorandum he wrote to Major Walker, Superintendent of the GTS. Dated 20 August 1861 from "Camp Little Tibet," the letter was written in response to a request from the Surveyor General for information on the status of the exploration of Chinese Turkestan. Montgomerie responded that "I estimate the unexplored Chinese territory that is accessible from British India at about 1,400,000 square miles. . . . We have a general idea of about 400,000 square miles of this, but are entirely ignorant of the remaining 1,000,000 square miles." He than observed the lack of any coherent system for trans-Himalayan exploration, with each explorer essentially started afresh, and no orderly accumulation of data or assignment of geographical tasks. "The present," concluded Montgomerie, "appears to be a capital opportunity for putting Indian explorers on a more permanent footing that would keep up its traditions and transmit the experience gained and the thread of the work in regular succession."⁶

In April 1862, Montgomerie presented a paper on the geography of Chinese Turkestan to a meeting of the Asiatic Society of Bengal, and it was in the course of this meeting that he gave the assembled members the benefit of his idea of training "natives of Hindostan" to take latitude observations and make route surveys in Central Asia and elsewhere. He spoke of testing their work by first sending them into areas already explored by Europeans, so that the accuracy of their results could be verified. Montgomerie concluded by asking the Council of the Society to consider his proposals, and said that he was willing "to draw up a project" if the Council wished.⁷

To gain approval for his ideas, Montgomerie mobilized support from his superiors. Major Walker, as Superintendent of the GTS, was known to be in favor of an "active" or "forward" policy along the frontier, having stated that he preferred the hostile actions of the tribes on the Northwest Frontier, which resulted in punitive expeditions by British forces and the consequent gathering of geographical information, to the "passive obstruction of the inhabitants of Chinese Tibet," which provided no such excuses. At a meeting of the Asiatic Society in 1863, Walker read out a letter from Montgomerie which detailed his proposals. The letter was written at "Camp Ladakh" and dated 28 July, 1862.8 In this letter, Montgomerie proposed to use "Mahomedans" from the Northwest frontier of India to explore Central Asia, and other races Each explorer would be trained to use a sextant and artificial from Tibet. horizon, a boiling point thermometer to determine heights, a pocket compass with a clinometer to measure the slope of the roads, and a chronometer watch. With these instruments, latitudes and heights (and a rough guess at longitude) could be obtained, together with a survey of the route taken and an account of the major places visited. Montgomerie admitted there might be difficulties in recruiting reliable natives "with sufficient nerve" and capable of being taught to use survey instruments. He referred specifically to one man, formerly employed by Major Walker on the Peshawar Survey, he thought would be suitable and named others who, he estimated, could be trained in the use of instruments at GTS Headquarters in a period of about eight Chinese Turkestan was proposed for the first journey, with the target months. the city of Yarkand. The exploring party could leave from Kashmir in May of 1863 and return in November crossing the Karakorum Pass, up to which point their observations could be checked against those of the Kashmir Survey. Later expeditions might cross the Northwest frontier past Kabul, or venture toward Lhasa.

Major Walker expressed to the Asiatic Society his own strong opinion in favor of these plans, as did the President of the Society, who spoke of geographical exploration beyond the British frontier as being "lamentably limited," and suggested that in addition to Central Asia and Tibet, the northeast frontier around Asam and the valley of the Brahmaputra would also be suitable areas for exploration, owing to the hostility to Europeans of the hill peoples there.

Montgomerie's proposals were forwarded to the Government of India in a letter of 8 May 1862, together with a request for Rs 1,000 to provide for their training. It was proposed that the explorer recruits should receive a monthly salary of 16-20 rupees.⁹ Approval was eventually received, but not until 1863.

3. Other British Attempts to Penetrate Tibet.

The two key events leading the Government of India to approve the training of Indian spies for exploration purposes were most probably the failure of two British-led expeditions to enter Tibet. One expedition, from China, got close to the Tibetan border before turning back, and the other, from India, was never able to start.

The China party travelling up the Yangtse was made up of Lieutenant-Colonel H. A. Sarel of the 17th Lancers, Captain Thomas W. Blakiston, an NCO with four Sikhs of the 11th Punjab Infantry, a Dr. Barton and a Russian missionary who could speak Chinese.¹⁰ It left Shanghai on 11 February 1861 and was the first expedition to travel under the provision of Article 9 of the Treaty of Tientsin (1858) as ratified in 1860 by China and Britain. Article 9 of the Treaty stated that "British subjects are hereby authorized to travel for their pleasure or for purposes of trade, to all parts of the Interior, under Passports, which will be issued by their Consuls and countersigned by the Local Authorities."¹¹ Sarel and his men hoped to cross Tibet from east to west, keeping to the north of the Himalayas, and emerging on the northwest frontier of India.

The Sarel expedition was therefore the first test of the new treaty rights, which the British hoped would gain them legal access to Tibet. Accordingly, the members of the expedition carried passports signed by Thomas Taylor Meadows, HBM Consul in Shanghai, and duly countersigned by the local Chinese authorities. Each passport stated that the holder was desirous of proceeding to India via Tibet. Although a privately organized venture, ostensibly travelling for purposes of exploration and sport, its diplomatic and geographical significance had not been lost. A flurry of letters travelled between British military headquarters in Shanghai, Hong Kong, Calcutta and London during the spring and summer of 1861. The Commander of Forces, Hong Kong, said that the mission was "of great interest" and that it was "in accordance with the wishes of H. M. Government that it should proceed."12 The Adjutant-General of the Army, in Calcutta, requested that the Governor-General should help "these enterprising officers," and a letter was duly sent by the Government of India to Major Ramsay, British Resident in Nepal, asking him to look out for the expedition and render them all necessary assistance.¹³ Ramsay contacted Montgomerie, giving him details, and Montgomerie responded that Sarel should reach Lhasa in early August ¹⁴

Alas, by that time the expedition, foiled by rebellions in Szechuan, and the unwillingness on the part of the Chinese authorities there to assist them--in spite of their passports--had already turned around and headed back the way it came. The failure of the Sarel expedition was to have a similar effect on the plans of Major Smyth to enter Tibet from India.

Major Edmund Smyth, Education Officer in Kumaon, was widely travelled on the Indian side of the Himalayas. He was anxious to continue his exploration across the Himalayas into Tibet, and had been organizing a substantial expedition since 1860. Servants had been hired, stores purchased and equipment shipped from England and then transported overland from Calcutta. The government of India supported the expedition, and helped defray the cost of the stores, as did the Asiatic Society. The Survey of India supplied some equipment, and it was proposed that a trained surveyor would travel with Smyth.¹⁵ Smyth intended that the expedition members should assemble at Almorah (in Kumaon) in March 1862, and leave in April for Pangong Lake on the Ladakh-Tibet frontier. 16

Problems soon arose over the question of passports allowing the expedition to enter Tibet. The government in Calcutta had been warned by Lord Elgin, on his departure from China (having signed the Convention of Peking and thus ratified the Treaty of Tientsin), that "great caution_should be used in allowing officers to enter Chinese Tartary / i.e. Tibet/, and calling to mind that the right to travel is restricted to persons who have passports duly signed and attested."17 This referred again to Article 9 of the Treaty of Tientsin, under whose provisions the Sarel expedition was at that moment proceeding up the Yangtse. But with respect to the Smyth expedition, the Viceroy was uncertain as to whether the Consul in Canton could issue passports in the case of British subjects proposing to enter Tibet, nor from China, but from India. Accordingly, the Indian government directed its requests for passports on behalf of Major Smyth and his party, not to Canton, but to Frederick Bruce, HBM Ambassador in Peking, and the brother of Lord Elgin. This request was made in May 1861, and further requests followed in June.¹⁸ Bruce's reply in July was cautionary, pointing out that under Article 9, passports could be issued only by British Consuls at ports open to trade, and that he did not consider it expedient "to propose its extension to other points" by asking the Chinese government in Peking for passports. Bruce suggested that Smyth should wait until the fate of the Sarel expedition became known.¹⁹ With the return of Sarel and Blakiston down the Yangtse, the Smyth expedition was halted in its tracks, and in October 1861, the Indian government informed a disappointed Smyth that "the expedition to Central Asia is not to be proceeded with."²⁰

Smyth did not give up. In 1862 he applied, unsuccessfully, to be allowed to try and reach Lhasa without a passport.²¹ The government in Calcutta was nevertheless supportive of Smyth's attempts to enter the western part of Tibet, away from Lhasa. Smyth proposed a 4-6 week trip to a town 120 miles south of Gartok, starting in September 1863, and said that he would take with him "two large magic lanterns for exhibiting dissolving views . . . in order to induce the Authorities to allow me to enter the country."²² The Government approved Smyth's use of official stores, but warned him not to force his way into Tibet "against the wishes of the authorities."²³ Alas, Western magic did not unlock the doors to Tibet. The local Tibetan authorities, although friendly, refused to allow Smyth to proceed beyond the border, saying that the two principal officials from whom he would need to obtain permission were in Gartok. A passport from Peking, however, Smyth was told, would do the trick. Still unwilling to give up. Smyth returned to India, and wrote to the Indian government telling them of his conversation with the Tibetan officials, and requesting that the government again apply to Peking for a passport on his behalf.²⁴ The government complied with Smyth's request, forwarding his letters to Ambassador Bruce, and asking Bruce to use his influence with the Chinese authorities. 25 Again, to no avail, for Bruce responded "that there is no prospect at present of obtaining such a document." The reasons for this lay primarily with the Tibetans' hostility to Western missionaries and their attempts to penetrate Tibet, Bruce said that he had "seen a curious letter from the chief Tibetan authority

to the Chinese Government" railing against Catholic missionaries trying to cross the frontier, and complaining of the harm done by the French Lazarist priests Huc and Gabet, who spent six weeks in Lhasa in 1846. In the letter, Bruce continued, the Tibetans showed themselves well aware of British desires to explore Tibet, and fearing missionary motives, the Tibetans urged the Chinese to refuse passports, saying that even with passports they could not guarantee the safety of travellers. China would be quite willing to agree to this request, commented Bruce, because China gained from her connection with Tibet by virtue of the authority it gave her over the Mongol tribes who recognized the religious supremacy of the Dalai Lama.²⁶ Under these circumstances, the Chinese, already weakened by foreign and domestic problems, and in danger of losing control over territories on the periphery of their Empire, were unwilling to violate the religious susceptibilities of the Tibetan lamas. Furthermore, to issue passports only to have them ignored by the Tibetans, as had happened in the case of Catholic missionaries, was merely to advertise Chinese weakness in the area.²⁷

Tibet and China therefore each had its own private reasons for wishing to exclude foreigners from Tibet, although in public each laid the blame on the intransigence of the other. Whatever the real reasons, public or private, the British found themselves unable to use Article 9 of the Treaty of Tientsin to gain legal entry to Tibet. The government of British India therefore decided to reach its goals by clandestine means. By the summer of 1863, Montgomerie's first agent was on his way. His destination was the city of Yarkand in Chinese Central Asia.

Endnotes

¹Fear of Russian influence in Tibet, and British mobility to establish direct communication with the Tibets, resulted in a military mission commanded by Colonel Francis Younghusband, which invaded Tibet in 1903-04. For details, see Perceival London, <u>Lhasa</u>: an account of the country and people of central Tibet and of the progress of the mission sent there by the English government in the year 1903-4 London: 1905; and see Francis Younghusband, <u>India and Tibet</u>: a history of the relations which have subsisted between the two countries from the time of Warren Hastings to 1910; with a particular account of the mission to Lhasa of 1904 London: 1910.

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Phillimore, R. H., Historical Records of the Survey of India, Vol. V (Dehra Dun: 1968), 474.

³Ibid., 480.

⁴Phillimore, R. H., "Survey of Kashmir and Jammu 1855 to 1865," <u>Himalayan Journal</u> (1959-60), 101.

⁵Memoranda on the Progress of the Trigonometrical Survey in Kashmir; Selections from the Records of the Punjab Government, Vol. V, No. 7 (1860), p. 17, Indian Office Library and Records, London. See also Survey of India Records, Dehra Dun, Vol. 53A. National Archives of India, New Delhi. $\underline{NAL}/$.

⁶Dehra Dun Vol. 53, No. 120 ff. /NAI/

Proceedings of the Asiatic Society of Bengal, No. 2, 1862, 209-213.

⁸Proceedings of the Asiatic Society of Bengal, No. 2, 1863, 175-9.

⁹Mason, Kenneth, "Kishen Singh and the Indian Explorers," <u>Geographical</u> <u>Journal</u>, No. 62 (1923), 431.

¹⁰See Thomas W. Blakiston, <u>Five Months on the Yang-Tsze</u> (London: 1862).

11 Treaties, Conventions, Etc., between China and Foreign States, Vol. I, 2nd edition (Shanghai:1917), Reprinted New York:1973, 407.

¹²Foreign Department Proceedings, Part B, June 1861, Nos. 90-92 /NAT/

¹³Ibid.

¹⁴<u>Ibid</u>., No. 186.

¹⁵Foreign Department Proceedings, Political A, No. 176. Letter_of C. U. Aitchison to Smyth of 9 August 1861. Also Part B, Aitchison to Smyth, 6 September 1861 /NAI/.

¹⁶Ibid., Smyth to Aitchison, No. 173, 17 July 1861 /NAI/.

¹⁷Ibid., Part A, Aitchison to Smyth, No. 112, 9 April 1861 $/\overline{NAI}/$.

¹⁸Ibid., Bayley to Bruce, Part A, No. 246, 21 May 1861 $/\overline{NAI}/$.

¹⁹Ibid., Political A, Bruce to Bayley, No. 192, 13 July 1861 /NAT/.

²⁰Ibid., Durand to Smyth, No. 193, 24 October 1861 $/\overline{NAI}/$.

²¹Smyth to Walker, 28 October 1862, DDn. Vol. 8, No. 95 /NAT/.

²²Foreign Department Proceedings, Political A, Smyth to Durand, No. 42, 9 May 1863 $/\overline{NAI}/$.

²³Ibid., Durand to Smyth, No. 43, 20 May 1863 $/\overline{NAI}/$.

²⁴Ibid., No. 60, 21 September 1863 and No. 61, 19 November 1863 $/\overline{NAI}/.$

²⁵Ibid., No. 62, 18 December 1863 /NAI/.

²⁶Ibid., Nos. 53-54, 29 March 1864 /NAT/.

²⁷ In 1861 the Lazarist priests Charles Renou and Auguste Desgodins had obtained passports valid for Tibet. Renou's passport was signed by the president of the Chinese Foreign Ministry in Peking, and that of Desgodins by the acting governor-general of Szechuan. But in spite of these documents, in June 1862 they were both halted on the Tibetan border by officials sent from Lhasa, and forced to return to China. See Luciano Petech, "China and the European Travellers to Tibet, 1860-1880," T'oung Pao, Vol. LXII, Nos. 4-5, pp. 219-221.