EDWARD PECK

The Search for Khan Tengri

(*Plate 33*)

Gottfried Merzbacher's contribution to mountaineering, both in the Caucasus and in the Central Tien Shan, is a remarkable one which has not hitherto received the recognition it deserves. This may be because, during the years following his death in 1926, Merzbacher's Jewish ancestry induced the Nazi-supported group of Munich mountain tigers to denigrate his achievements. It is now high time to redress the balance.

Merzbacher was born in Baiersdorf, Bavaria in 1843 and his early climbing days included over two dozen ascents in the Dolomites (Marmolada, Rosengarten, etc) and in the Kaisergebirge, in particular a first ascent of the Totenkirchl in the Wilder Kaiser range. As owner of a successful fur business in Munich, he was able to indulge his passion for mountaineering and was soon looking to distant ranges.

In 1891 Merzbacher took two Tyrolean guides to the Caucasus where they failed on Ushba but reached six other important summits. In 1892 he led a second expedition, this time to the Eastern Caucasus, and explored some peaks and passes which had not been visited by Freshfield or any other British climbers. His meticulous accounts of the topography, geology, glaciers and ethnology of the Caucasus, together with detailed records of his journeys, occupy two heavy volumes entitled *Aus den Hochregionen des Kaukasus* (Leipzig 1901).[1] These include a wealth of illustrations and magnificent panoramas, many worthy of Vittorio Sella whose work he much admired.

It is Merzbacher's exploration of the Central Tien Shan that concerns us here and, in particular, his pursuit of the elusive Khan Tengri. In 1892, after his second visit to the Caucasus, he paid a flying visit to the Tien Shan and was fascinated by his first distant sight of the high peaks. He was further inspired by an account by the Russian, P Semenoff, who, in 1856[2] and 1857,[3] had explored the region around the great lake Issyk Kul, including parts of the Russian–Chinese borderlands up to the glaciers of the Tien Shan mountains. Despite near brushes with roving bands of Kyrgyz, Semenoff had pushed east from the Issyk Kul as far as the Santash Pass (2155m) leading over into the Tekes River valley. (It was on this pass that Tamerlane instructed each man in his army to drop a stone on his way to the war against China: those returning should each pick up a stone. In this way, losses could be counted.)

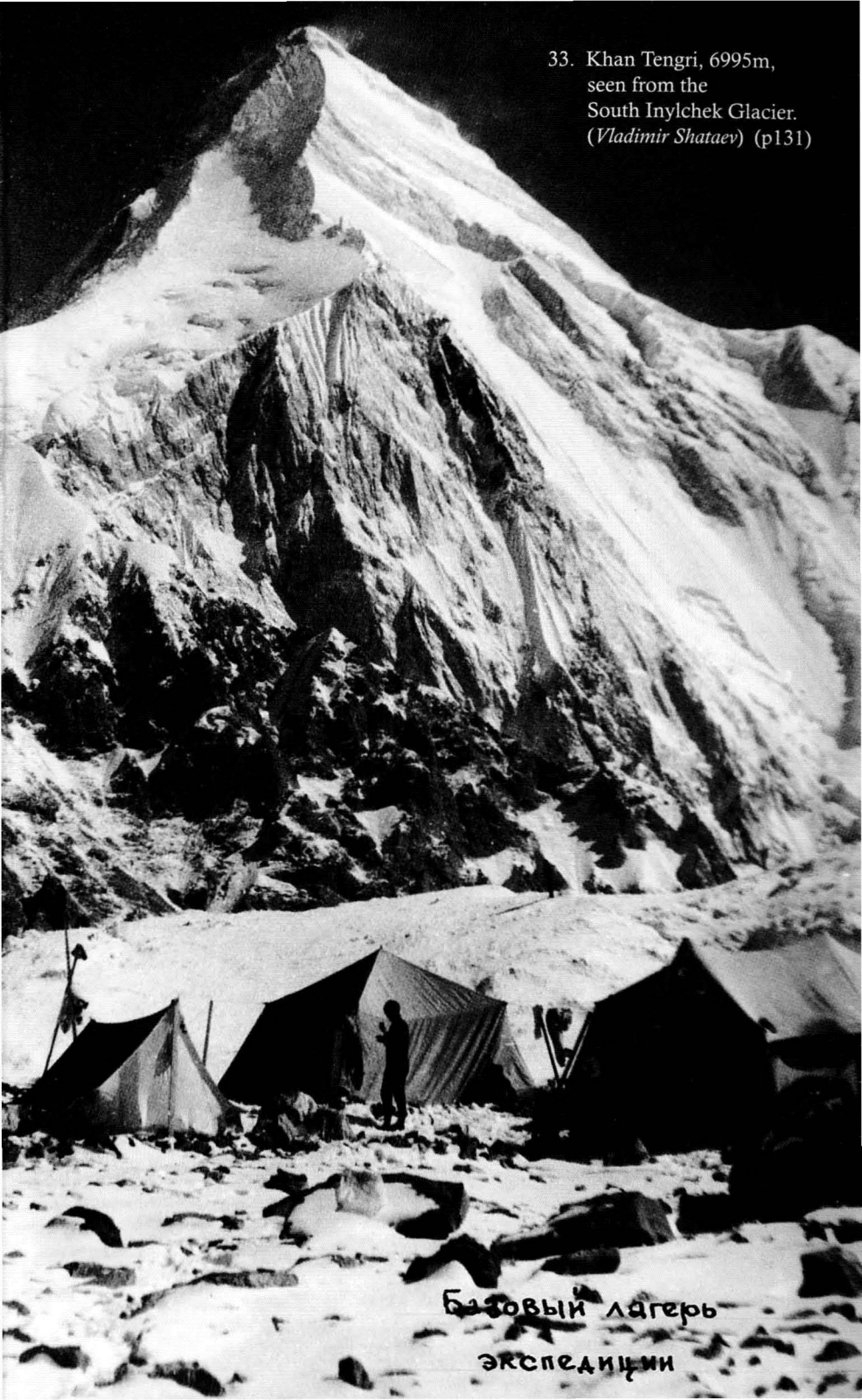
Beyond the Santash Pass lay Kyrgyz country and, as Merzbacher found 45 years later, a flourishing summer market at Karkara, open from May to September, where the Kyrgyz bartered horses, wool and skins in exchange for metal, cloth, glass and silk goods brought by the Tartar and Sart traders. Some distance beyond this the Russians had established a fort at Narynkol to control routes into Chinese Turkestan.

In Semenoff's report comparisons with the Alps abound. He likened the Issyk Kul to the Lake of Geneva seen from the Col du Jaman (though the high peaks beyond far out-topped the mountains of Savoy), and the Tien Shan to the view of the Oberland peaks from the Faulhorn. He admired alpine meadows, inaccessible gorges and, above all, huge glaciers longer than any in the Alps. Three particular aspects of topography intrigued him: first, the parallel ranges of the high mountains encompassing the westward-flowing valley of the Naryn, the most northerly of these ranges, seen as a formidable wall (the Terskei Ala Tau) flanking the southern shores of the Issyk Kul; second, the tortuous exits from both these ranges, gouged out by the rivers whose considerable summer flooding indicated sources in the glaciers above. Merzbacher was to make a contribution to the solution of the problem of these rivers, but he became even more fascinated by Semenoff's third and most significant topographical observation. Semenoff wrote:

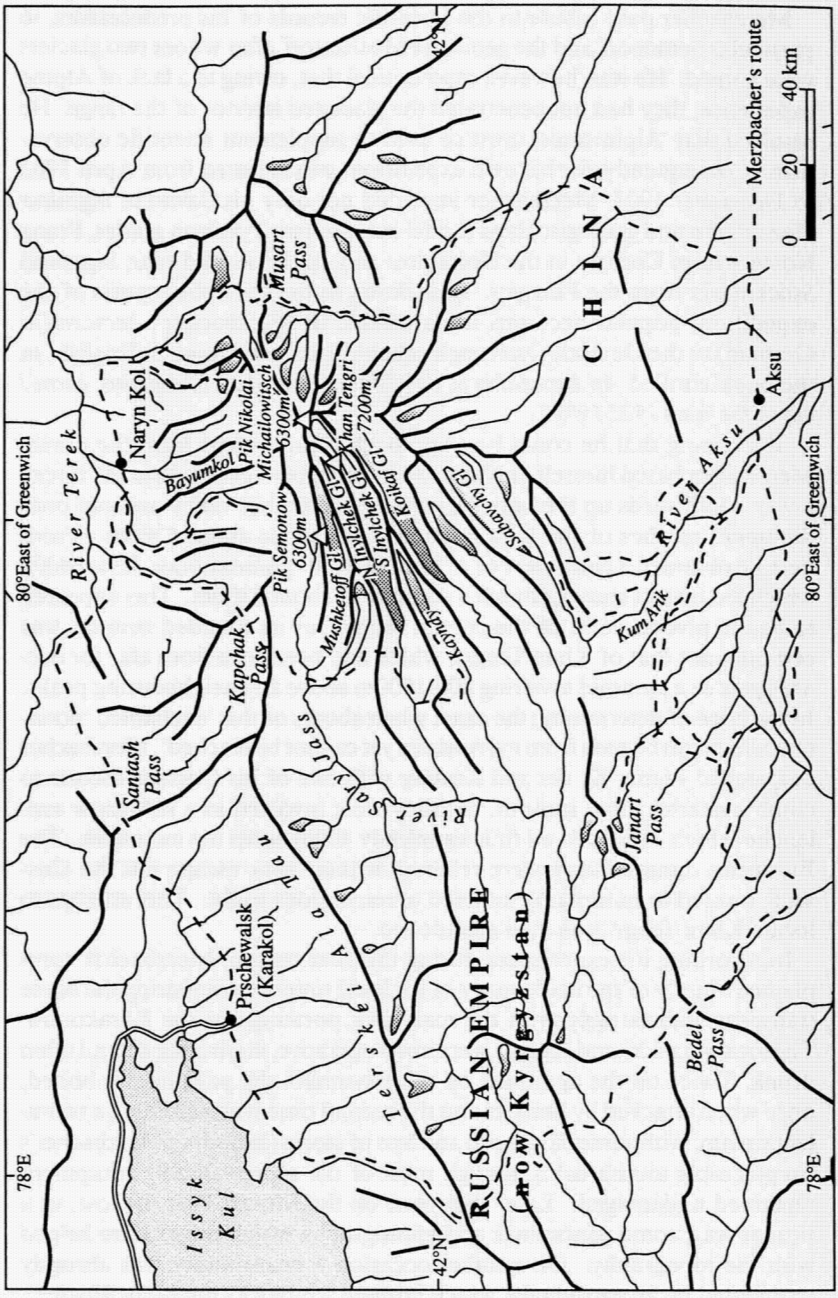
> ... the limiting chains seem to have melted together into a gigantic nodal point, and the whole range reaches a tremendous height. Like a gigantic citadel, the fine Tengri group towers high above the Tien Shan ridge. A huge, almost spotless mantle of snow covers the whole group and surrounds the numerous colossal peaks, among which Tengri Khan – the 'Lord of Heaven' – takes the first and worthiest place. I estimate its height at 20,000 feet; and the snow level on the north flanks of the Tengri I found to be about 11,540 ft. [4]

Subsequent Russian explorers and scientists, inspired by Semenoff's report, visited the area, including the famous Przhevalsky ('of the horse') who died in 1888 near the east end of the Issyk Kul at Karakol (renamed 'Przhevalsk' in his honour, but now once more 'Karakol'). They gathered a great deal of information on the geology, flora and fauna of this remote corner of the Tsarist Empire where Kazakhstan, Tajikistan and Kyrgyzstan now come together to border on the Sinkiang province of Chinese Turkestan. A map was drawn up which showed Khan Tengri as the nodal point of the range.

One important geological fact emerged: the pointed peak of Khan Tengri was no volcano but a steep-sided pyramid, probably of crystalline quartz, towering above its neighbours like the Matterhorn, but in shape more resembling the Dent Blanche. Another peculiarity of the Tien Shan range is that not a drop of water from it reaches the open sea, all being absorbed into the inland basins of the Tarim, Lake Balkash and the Aral Sea.



33. Khan Tengri, 6995m, seen from the South Inylchek Glacier. (*Vladimir Shataev*) (p131)



Sketch map adapted from the map on p123 of Gottfried Merzbacher's article in *Zeitschrift des Deutschen und Österreichischen Alpenvereins, Vol 37*, 1906. Merzbacher's spellings and heights have been retained.

Merzbacher paid tribute to the scientific records of his predecessors, in particular Semenoff and the geologist Mushketoff after whom two glaciers were named. He was, however, most critical that, owing to a lack of Alpine experience, they had not penetrated the glaciated interior of the range. He resolved that 'Alpinismus' must be used to supplement scientific observation. Consequently, for his own expedition, which lasted from April 1902 to December 1903, Merzbacher imported not only his Bavarian *ingénieur* Hans Pfann and geologist Hans Keidel but also two Tyrolean guides, Franz Kostner from Corvara in the Dolomites and, in the second year, Sigmund Stockmayer from the Pinzgau. In addition to the scientific reports of the expedition, popular accounts are available in Merzbacher's lecture (in German) to the Deutsch-Österreichischen Alpenverein[5] and, in English, in the book entitled *An Expedition to the Central Tian Shan Mountains, carried out in the years 1902-1903.*[6]

Reckoning that he could best approach Khan Tengri from the north, Merzbacher based himself at Narynkol in the upper Tekes valley. He forced a way southwards up the narrow, twisting Bayumkol valley and out onto the upper reaches of the East Bayumkol glacier at about 4300m. From here he obtained a clear view of a 'Marble Wall' ('*Marmornaia Stena 6400*') which led up to a snowy, rounded summit at about 6300m. This appeared to be the pivotal point of the central range, but its rounded summit was certainly not that of Khan Tengri, which had been seen from afar for decades past as a pyramid towering 800-1000m above any neighbouring peaks. In the hope of determining the exact whereabouts of this 'enchanted mountain which can be seen from everywhere yet cannot be reached', Merzbacher despatched Pfann, Keidel and Kostner with one of his Cossack escorts to climb a nearby snow summit, but they were involved in a soft-snow avalanche which deposited all four harmlessly 400m down the mountain. The European mountaineers were relieved at their easy escape but the Cossack, unused to mountains, suffered a tremendous fright. This attempt to locate Khan Tengri was then abandoned.

In recording his experiences during this first season, Merzbacher complained bitterly of the inadequacy of his local support, comparing the horse transport unfavourably with the man-back porterage of the Karakoram. The local Kazakhs and Kyrgyz were unco-operative, ill-disciplined and often drunk. Twice on the approach up the Bayumkol the pack horses bolted, once when attacked by hornets and the second time when crossing a turbulent stream, with some damage to and loss of stores (including Merzbacher's irreplaceable toothbrush!), though most of the more valuable equipment remained undamaged. Later that year, on the Musart Pass, he lost, in a similar way, some panoramas and photographs which might have helped with the topography. On another occasion a near-mutiny was abruptly terminated by an earthquake which brought ice-blocks tumbling down.

Moving round to the south-west, Merzbacher next tried an approach from the Semenoff glacier, identifying a fine snow peak at its head which

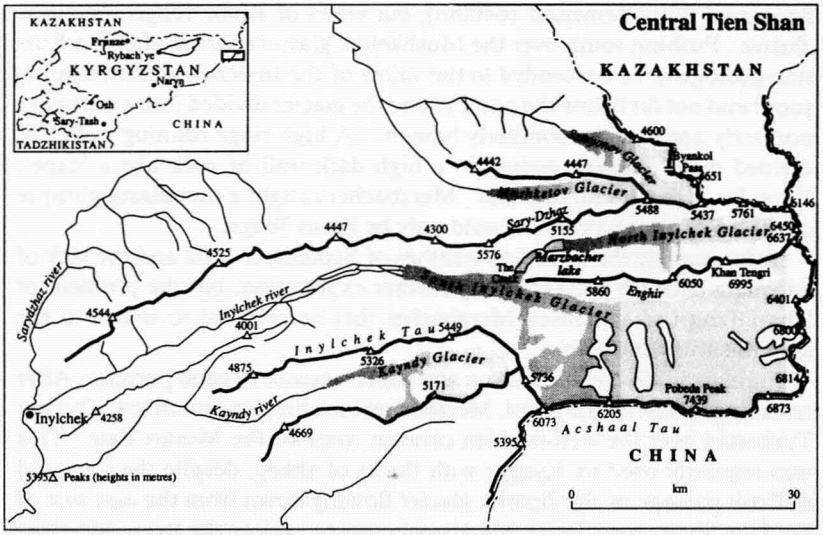
he named Point Semenoff (6400m), but views of Khan Tengri remained elusive. Pushing south over the Mushketoff glacier (named after the Russian geologist), he descended to the valley of the Inylchek glacier, near its snout and not far below the point where the glacier divided into a narrower northerly and a wider southerly branch. A high ridge running E–WSW divided these glaciers, ending in a high dark wall of rock like a 'cape'. Here, for 'a few hundred paces', Merzbacher caught a tantalising glimpse of the tip of a high peak: it could only be Khan Tengri.

Unfortunately the appalling weather of September 1902 and the lack of adequate back-up prevented any further exploration, but the problem of Khan Tengri so tantalised Merzbacher that he resolved to return to the area the following year.

The expedition put the autumn and winter seasons to good purpose. After returning to base at Narynkol, Merzbacher took his party south into Chinese Turkestan over the well-trodden caravan route of the Musart Pass. This was regularly used by Kyrgyz with flocks of sheep, despite the long and difficult passage of the Jiparlik glacier flowing down from the east side of the Tien Shan range. Later, Merzbacher was to explore the steep side-glens running down from his 'Marble Wall'.

Winter quarters were established in Kashgar. Pfann returned home. The geologist Keidel made surveys on the southern edge of the Akshakal range. Merzbacher paid a flying visit in mid-winter to Tashkent to collect stores and a second Tyrolean guide, Sigmund Stockmayer from the Pinzgau. He also succeeded in persuading the governor of Russian Turkestan to let him have some ten or more regular Cossacks, accustomed to the mountains, so that his 1903 explorations would not be so handicapped as those of 1902. In March he was back at Kashgar ready to explore the Kokshal chain, the most southerly of the ranges extending westwards from the Central Tien Shan. The Kokshal chain lies to the west of the town of Aksu, situated on the river of the same name, known locally as the Kumaryk-Alik, one of the major streams draining into the Tarim Basin. Local tradition maintained that the glaciers of the Central Tien Shan drained into the Tarim Basin through the so-called Janart Branch of the Aksu. Merzbacher was able to refute the idea that this relatively insignificant stream could be the outflow of huge glaciers.

On his climb to the Janart Pass he identified the 'wonderfully bold' Petroff Peak, but he had no sight of Khan Tengri. Instead he pressed up the Kumaryk (or Aksu) river until he reached an impenetrable gorge through which flowed a vast flood of water. This was, in fact, the outflow of the Sari-Jass river system which drains all the western glaciers of the Central Tien Shan. He discovered that the east wall of the gorge was the end of the Sabavchy ridge, itself the westerly containing-wall of the Sabavchy valley. He pushed up this side valley for ten of its eighteen kilometres, but was unable to ascertain where or whether the glacier at its head connected with the main system.



By now it was June (1903) and time to return to the north side of the range to make another attempt to fathom the mystery of Khan Tengri. The traditional caravan route to the north over the west Tien Shan took the Bedel Pass and then headed west. Merzbacher at first followed this route but, instead of bearing west, he diverged northwards, crossing the Borkuldoy range close to Peak Catherine, and then over the more difficult Soktu Pass (4250m) to regain the south bank (the Terskei or shady side) of the Issyk Kul at Slivkina and so back to Przhevalsk. He was impressed by the two parallel ranges running E–W of this westerly part of the Tien Shan, with their many high, rounded, glaciated peaks but, like Semenoff, he was particularly struck by the continuous wall of the Terskei Ala Tau, averaging 5000m and dominating the south side of the Issyk Kul.

It was not until July 1903 that Merzbacher was able to set out again on the hunt for Khan Tengri. Pushing 17km up the Semenoff glacier to an easterly bay at its head, he found this linked up with the Bayumkol valley to the north-east and named it the Bayumkol Pass (now 'Byankol') at 4200m. He obtained a good telephoto view of Khan Tengri but was still puzzled to ascertain 'out of which valley rises the terminal cone of Khan Tengri, even though it towers 1000m over the neighbouring peaks'. Trying the Mushketoff glacier again, he found some 'wonderful ice peaks' on its south side but established that, though its head shared a common névé basin with the Semenoff glacier, there was no connection with the elusive Khan Tengri, as 'gigantic mountain walls' were interposed between the névé basin and the mountain.[7]

This year he took a more difficult pass from the Mushketoff glacier into the Inylchek valley near the point at which, the year before, he had glimpsed

what he believed to be Khan Tengri. He thought that the narrower north branch of the Inylchek glacier would bring him nearer to his objective; but when attempting to move from the south to the north branch round the foot of the dark wall of the buttress dividing the two glaciers, he found his progress blocked by a lake dotted with icebergs and enclosed on both sides by precipitous rocky walls rising from the water's edge for about 1200m. About 1¼km wide, the lake extended 4km up into the north branch of the glacier. The peculiar characteristic of this lake is to empty itself, usually twice a year, in a sudden rush when the pressure of water forces out the glacier plug. Though this phenomenon did not occur during Merzbacher's visit, the lake is now officially known as 'Marzbacher's Lake' (*sic*). It is well described by Colin Lewis in an article entitled 'The Mystery of Marzbacher Lake' in *Geographical,* October 1994. It may soon risk becoming somewhat of a tourist attraction.

Foiled in his attempt to make his way up the N Inylchek glacier, Merzbacher turned his attention to the southern branch judging, correctly as it proved, that Khan Tengri must lie on the ridge running east from the dark buttress dividing the glaciers. From a high camp about 14km up the southern branch, he set out with his two Tyrolean guides across the high snowfield. After pressing on for five hours with the ridge still concealing the view, they finally reached a point at which

> ... dramatically, a fine snowy summit, glittering in the sun, appeared ahead, with colossal white marble buttresses projecting from it – a few steps further and a huge pyramid stood out freely, its bases soon coming into view ... the grand mountain, the monarch of the Tien Shan, revealed himself to my enraptured gaze in all his naked majesty, from his feet rooted in the glacier, up to his crown wrapt in the sunlit shifting mists ... Nothing whatever intervened to conceal any part of the so long mysteriously masked base of the mountain.[8]

Merzbacher estimated that his own position on the glacier was at about 4500-4600m, while the summit might be another 2600-2700m above him, making its height around 7200m, standing 800-1000m above the ridge at its base. (This was an over-estimate, as the height of Khan Tengri is currently accepted as 6995m.) He reckoned that the final pyramid of the mountain would be essentially a rock climb, with the strata of marble slabs dipping the wrong way, but would be manageable by a strong party, experienced in rock climbing, well equipped and well supported by '15-20 young, skilled Cossacks with mountain experience'. The first ascent of Khan Tengri was made by M Pogrebetski and party in 1931.

Lacking the necessary back-up for an attempt on the summit, Merzbacher and his two guides retreated down the 75km of the Inylchek glacier up which they had come, but not before making sure that its uppermost basin continued for another 13km, thus establishing beyond any shadow of doubt that Khan Tengri was not the nodal point of the range but on a ridge

extending WSW from it. Unfortunately, they did not continue far enough to look southwards round the corner of a side glacier, where they might have perceived what is now known to be the highest peak of the range, Pik Pobeda (7439m) – a less prominent-looking summit than the dominant Khan Tengri.[9] However, Merzbacher must have suspected the existence of an important range to the south for, after returning down the Inylchek glacier, he took his party across the Achailo Pass to the east into the Kayndy valley. This glen was already known to Russian surveyors but Merzbacher proved it to be only a few miles long. Its head was cut off by the much longer Koikaf valley, impassable in its lower reaches but accessible to local shepherds over a wide saddle from the Kayndy. The middle pastures terminated in a formidable wall and gorge. He pushed through the gorge as far as time allowed, and ascertained that a long glacier must stretch back towards the head of the Inylchek and abut on the main range near his 'Marble Wall', well beyond the point at which the pyramid of Khan Tengri rose from the intervening subsidiary ridge.

Merzbacher was so excited by his discoveries that he determined to enlarge his knowledge of the area by returning to his base at Narynkol, 250km distant. The route he took went round the W ridges of the Central Range, descending at points to follow the Sari-Jass river. This was that great stream which collected the waters of all the west-flowing glaciers (and of the SE flanks of the Terskei Ala Tau as well) whose outlet into the Tarim basin Merzbacher had discovered as the Kumaryk or Aksu.

Back at Narynkol he determined to check the position of the 'Marble Wall' in relation to Khan Tengri from his earlier trip up the Bayumkol. He did so to his satisfaction from point 4400m on the West Bayumkol glacier and from point 4600m on the northern edge of the East Bayumkol glacier. Reckoning that the 'ramification of central crests' radiated from this summit, he named the 'Marble Wall' summit after the President of the Imperial Geographical Society, Prince Nikolai Mikhailovitch.[10]

But the insatiable Merzbacher was still puzzled by the complex of lesser ridges and valleys to the north-east of Pik Nikolai Mikhailovitch, towards the Musart Pass. An exceptionally fine October gave him the chance to explore these steep and difficult valleys – the Saikal, the Dondukhol and others. Although fine alpine meadows existed in the middle reaches, direct access to these valleys could only be made through canyons impassable to flocks, though in one case an easy lateral pass allowed access by shepherds. From one of them he caught a glimpse of Khan Tengri towering over an intermediate ridge, but this sighting added little to the topographical knowledge he had already acquired.

The approaching cold weather dampened even Merzbacher's enthusiasm and the party finally left Narynkol, travelling northwards over the Temurlik Tau to Kulja and thence to Tashkent which was reached in December 1903. Despite frustrations and delays, Merzbacher had no reason to feel dissatisfied by his 15 months in the Tien Shan. Using the cumbersome

apparatus of the period, he had returned with 2000 photographs, many of them worthy of his master Vittorio Sella and often obtained after waiting hours for the perfect shot.

Some names have since been changed by the Soviet authorities. Some heights and locations have been more precisely determined as a result of subsequent explorations. However, Merzbacher made a major contribution to Russian mountain geography by establishing the true relationship to its neighbours of that great towering Matterhorn-like peak, Khan Tengri, the most outstanding, though not the highest, summit of a magnificent range which is now accessible to Western climbers.

REFERENCES

1 Review by 'HW' in *AJ21*, 54-62, 1902.

2 P Semenoff, 'Narrative of an Exploring Expedition from Fort Vernoye to the Western Shore of the Issyk Kul Lake, Eastern Turkistan. Sept/Oct 1856', in *The Journal of the Royal Geographical Society, Vol 39*, 311-338, 1869. Translated from the Russian of P Semenoff, President of the Physical Section of the Imperial Russian Geographical Society, by E Delmar Morgan FRGS.

3 P von Semenow, 'Erforschungsreisen in Inner-Asien im Jahre 1857' in *Petermann's Geographische Mitteilungen, Heft IX*, 351-369, 1858.

4 *Ibid*, 361.

5 Gottfried Merzbacher, 'Der Tian-Schan oder das Himmelsgebirge – Skizze von einer in den Jahren 1902 und 1903 ausgeführten Forschungsreise in den zentralen Tian-Schan' in *Zeitschrift des Deutschen und Österreichischen Alpenvereins, Vol 37*, 121-151, 1906.

6 Gottfried Merzbacher, *An Expedition in the Central Tian Shan Mountains carried out in the years 1902-1903*, published under the authority of the Royal Geographical Society by Murray, 1905.

7 *Ibid*, 191.

8 *Ibid,* 208.

9 Józef Nyka, 'Kazakhstan mountaineers traverse main range of Tien Shan from Pik Pobedy to Khan Tengri' in *AJ96*, 255-256, 1991/92.

10 *Op cit*, Merzbacher, 211.