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# Cordillera de Potosí, Bolivia

(*Plates 41–44*)

Papers of mountaineering interest about the Cordillera de Potosí are extremely few. There are two in English, one in Spanish and a handful in German. But all flowed from the pen of a single writer and all originated early this century. There also exist several very brief notes in geographical and scientific journals and that is all. This paper endeavours to bring up to date the available mountaineering information related to the Cordillera de Potosí, and also to describe my own exploration of the range.

## The city, the Silver Mountain and the range

To mountaineers Southern Bolivia is an unknown land; it is a high desert, nearly unpopulated. From its plateau of gravel and stones emerge a number of elevations that attain their highest point (*c*5900m) near the border with Argentina. But true mountain peaks are scarce, and few constitute even a small chain. Only east and south-east of the famed colonial city of Potosí there rises a strange, continuous mountain range with no official name. In 1903 alpinist Henry Hoek named it the Cordillera de Potosí. The inhabitants of the area use instead Cari Cari for its northern half and Andacaba for its southern half. The northern end of the range is located some 13km east of the colonial city itself, but the southern end cannot be seen from the city because the famous Cerro Rico ('Rich Hill') and some intervening ridges block the view in that direction.

The city of Potosí lies at 4060m and is the highest city in Bolivia. It is located within a basin protected by arid rolling hills and, to the east, by the Cerro Rico and the Cordillera de Potosí. Thus, in spite of its altitude it is not too cold. The city was famous for the copious silver that was mined in its Cerro Rico and it has been written that in the 1600s Potosí, then with 160,000 inhabitants, was the third largest city in the western world, after Paris and London. With its silver mines now depleted, the city can barely sustain a population of about 80,000. It is a decadent and depressing place, with only two or three fairly good hotels and not even as many acceptable restaurants. Still, historically speaking, it is one of the most famous cities in the world.

Like a gigantic brown-red anthill, the Cerro Rico de Potosí rears its conical shape 800m above the city to a height of 4824m. Its former names – Potocchi for the Indians and Cerro Rico for the Spaniards – are now no longer used: its official name is Cerro de Potosí. In the wet months (December to the end of April) the hill may occasionally appear dusted with snow, which fades away in a few hours. Once the city is left behind

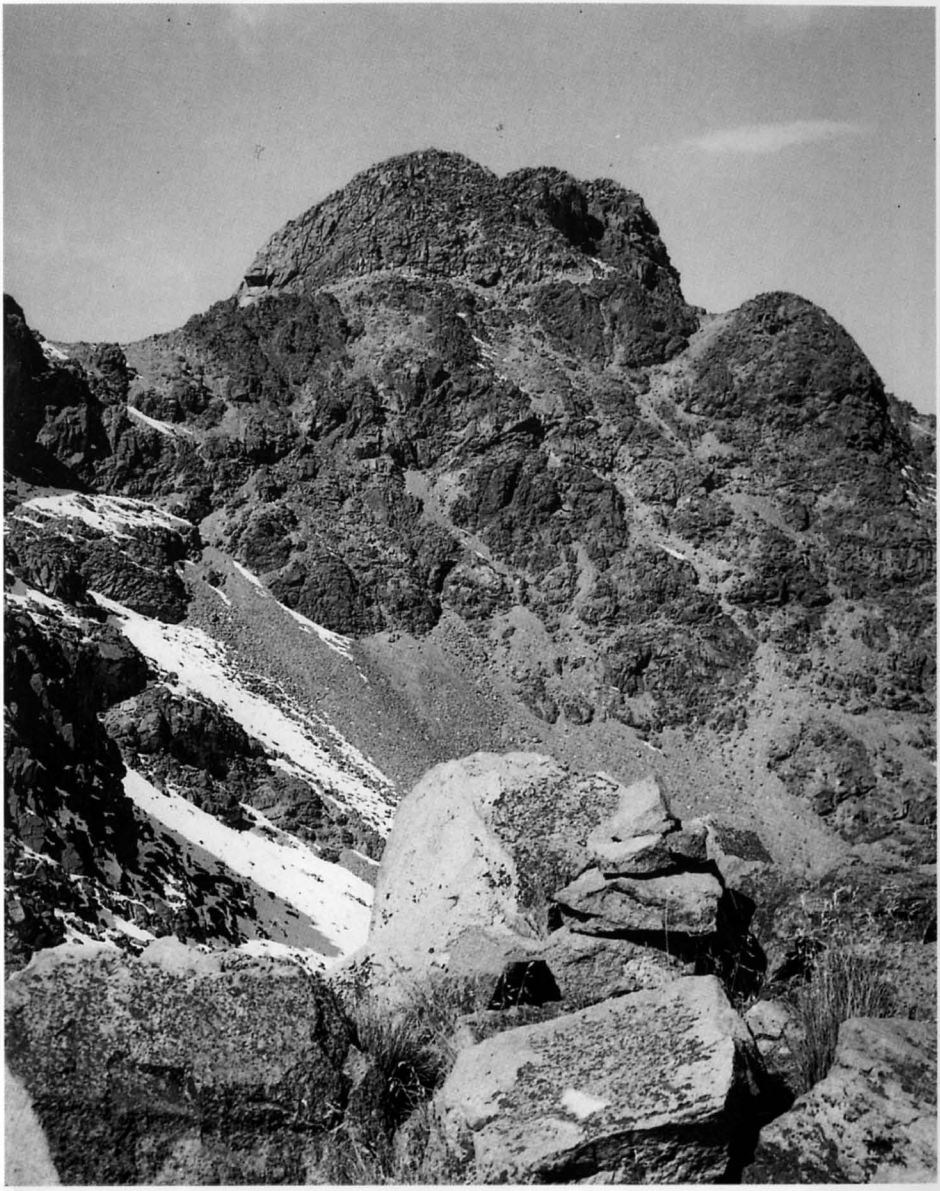
and the hill is seen from the plateau, it looks like a mere brown hump – a hill among many. Inevitably, a television antenna had to be erected upon its summit and a caretaker of the station inhabits a nearby cabin.

The dimensions of the Cordillera de Potosí are smaller than had previously been reported. It stretches in a N–S direction for about 25km and contains some 50 peaks rising above 4800m. The range is noticeably divided into two groups separated by a depression. The name Cari Cari, applied to the northern half, means, in Aimara, 'Man Man'; quite apt, since the rock peaks stand as rows of sentinels. This northern portion begins with a massif that contains some ten peaks between 4900m and 5040m lying west of the Huacani lakes. This section is some 13km due east of the Potosí city limits.

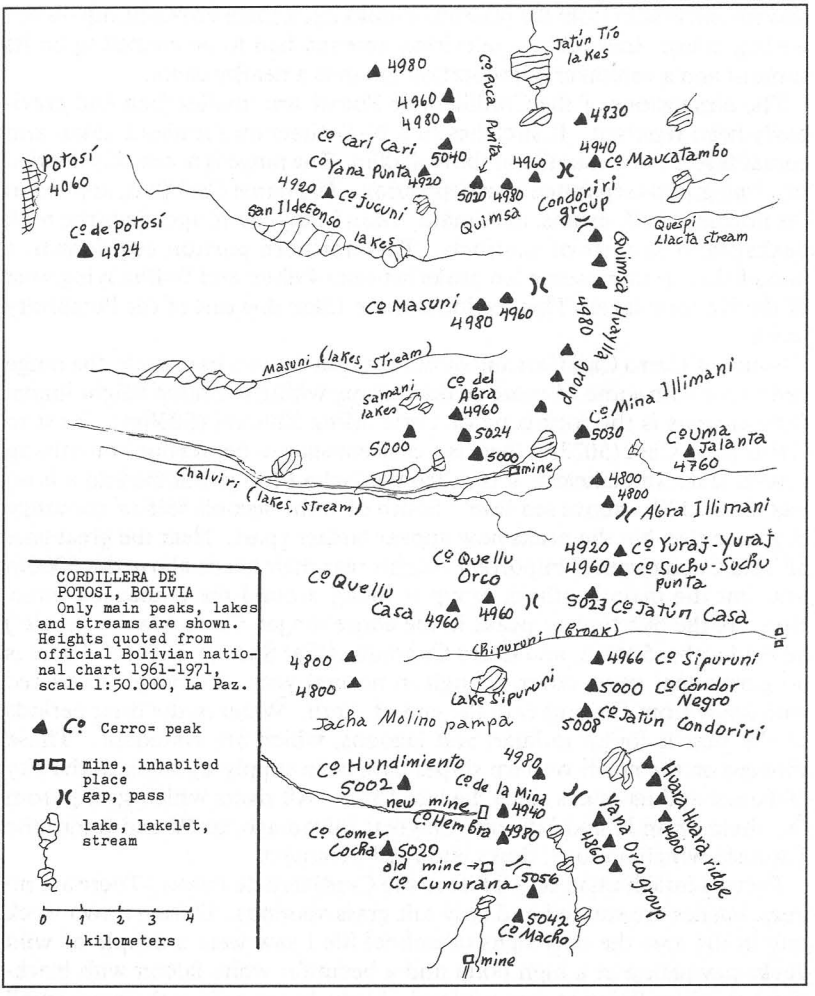
South of Cerro Cari Cari and of the Quimsa Condoriri massifs, the range continues with some 15 more peaks keeping within the same height limits. Conspicuous is the rock cone of Cerro Mina Illimani (5030m). Next to Cerro Jatún Casa (5023m) there is a crescent-shaped depression con-taining several lakes and lakelets; it is called the Jacha Molino Pampa and it is no less than 4300m above sea-level. South of it the second half of the range begins to rise, but the peaks now appear farther apart. Near the great lake of Tala Cocha several important heights rear their heads above the 5000m line, but the main southern group is found around the Andacaba mine. Here are the two highest peaks in the entire range: Cerro Macho ('male') de Andacaba, 5042m, and Cerro Cunurana ('Fat Snow'), 5056m. There is no permanent snow cover, though in normal years the range is covered with snow from December to the end of April. Water in the drier periods of the year is found in lakes and lagoons, which are abundant. Those situated on the north-western slopes have been supplying water to the city of Potosí and its mines since the late 1500s. All rivers which spring from the chain drain N and NE into the great Pilcomayo, or W and S into the Tumusla which, in turn, flows into the Pilcomayo.

There is little human or wildlife in the Cordillera de Potosí. There are no trees, bushes are stunted and only tuft grass abounds. During a two-week stay in the area the only signs of animal life I saw were a couple of wild ducks navigating in a high pond and a beautiful white falcon with black-rimmed wings flying at summit level. In the lower valleys there are small flocks of sheep and llama tended by their Indian owners who, whenever possible, avoid contact with strangers. No tourists or sportsmen are known to visit the range.

The penetration of the Cordillera de Potosí began early, with the exploitation of the Cerro de Potosí. There are many legends about the discovery of the Cerro's endowment of summit silver, but history relates that on 10 April 1545, Captain Johan de Villarroel, with several Spaniards and Indians, ascended the mountain to take possession of its contents. For a peak 17m higher than Mont Blanc, with permanent snow at the time, the Paleface smelled its riches; it was one more high summit to add to the impressive record of Spanish mountaineering that took place on the American continent between 1521 and the end of the colonial years around 1810.



41. Cordillera de Potosí, Bolivia. The South Face of Cerro Cari Cari, 5040m, highest peak in the northern half of the Cordillera. (*Evelio Echevarría*) (p162)




How many times the peak of Potosí had been ascended, we shall never know. How long ago it was! Two more centuries were to elapse before de Saussure's march to Mont Blanc. But it was certainly to exploit the silver that the Spaniards first entered the Cordillera de Potosí. It may have been from the summit of the Cerro itself that they had seen major lakes nestling in the nearby range. There are records dating back to the mid-1500s of *laguneros* (caretakers of lake dams) living in this area. These lakes seldom occur below 4200m and may even be found near the 4600m mark. But apart from their hydraulic engineering enterprises, the Spaniards appear to have left the Cordillera de Potosí alone.

## Mountaineering 1903-1985

The first mountaineer to penetrate the range was the German geologist, soldier, poet, skier and climber Henry Hoek. The son of a Dutchman and an Irishwoman, he was born at Davos in 1878 and died in Vaduz in 1951. He was a member of the German geological expedition of 1903 that surveyed southern Bolivia from the Argentine border to near La Paz and Cochabamba. All the publications mentioned at the beginning of this paper poured from his pen and to him we owe what mountaineering information existed up to the present. He belonged to that unique breed of mountaineers who cannot separate the physical effort demanded in climbing from the mental and spiritual experience. Herr Walter Kaltenegger described Hoek as 'certainly a great mountaineer in the old sense'. Hoek was also an accomplished writer and translator.

Having entered Bolivia through its bleak, stony southern plateau, Hoek and his companions were naturally surprised to behold in the distance a continuous rock range: ' ... a far stretching wall of mountains with striking, because individually formed, peaks ... an unknown ... unmarked mountain world.'

The expedition changed course, reached in November the Andacaba mine at the SW end of the range, and undertook some two weeks of studies and of climbing. Hoek and leader Gustav Steinmann ascended the Hembra ('female') of Andacaba. They were told at the mine that Indians had previously erected a cairn on the summit of this mineralised mountain (4980m). Then Hoek traversed alone to the summit of Anaroyo, highest peak in the entire range (today Cunurana, 5056m). It was when recalling that occasion that Hoek wrote a paragraph typical of him:

> After I had exhausted the actual scientific interest of the view ... I was overcome by a feeling of absolute loneliness, such as I have never before experienced on any peak, not even in mid-winter, when all Nature is frozen into silence. Day was fast closing in. Everything in the clear distance became gradually merged into an undecided bluish-brown, an extraordinary mauve colour. In this lonely hour, when the very silence seemed audible, I lay there and listened to the far-away murmuring of the hurrying waters of the great European life-stream echoing in my mind. Many an image of home rose up from the sea of the past; but viewed from an altered stand-point the prospect also alters. I have come to think differently of many things out here, and to think consciously. In the silence, in the far off solitude, it often seems as if a quiet observer were concealed deep in your innermost being, noting your every thought, and you are conscious of this; and this observer forces his being into the most secret corners of your heart, and so on in an endless succession. Strange melancholy impressions are awakened by the bare dead landscape in whose centre you are absolutely alone with your thoughts.

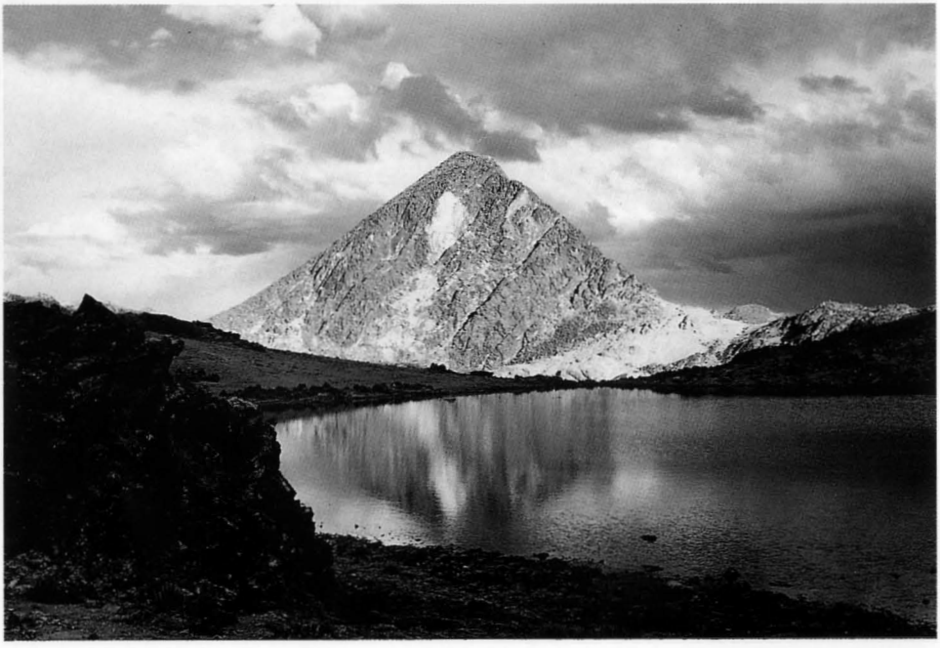
After a short stay in the city of Potosí the Germans returned to the Cordillera. They accomplished its crossing at its waist by an ill-defined pass near the lake Mina Illimani and climbed a peaklet nearby. Hoek collected local names, prepared a good sketch-map (which, with the above quotation, appeared in *AJ23*, 20-26, 1906), took a few photographs and wrote several papers about his explorations (see Bibliography on page 172). If the name of any mountaineer is to be associated with the Cordillera de Potosí, it should be his.

As far as is known, at least from the mountaineering viewpoint, the range was thereafter left undisturbed. In late 1983 I said to myself that it had slept in solitude for too long and that its list of mountain ascents should be increased. Research in all likely areas, particularly scientific, could only disclose that the geologist Dr Manfred Wolf, of the German Democratic Republic, had published two papers on the metallogeny of the range. It seems that he ascended Hembra de Andacaba and may also have done other ascents in the southern end of the range. But that was all I was able to discover. Satisfied that I was to break new ground, I travelled to Bolivia in December 1983, at the beginning of the rainy season. I had taken for granted that the Potosí district was very dry, that climbing there would be possible any time of the year and that the only problem would be to find water. November of 1903 must have been a very dry month, or so it appears from Hoek's writings. Having arrived there 80 years and two weeks later, I found that things were very different. I only stayed in the area for a week, with nothing else to do but to behold the decadence of an imperial city and the fronts of dense rain-clouds pouring their content over the Cordillera. In 1985, wiser, I was back there in May. The weather was fairly good, even if sunny days were not really warm. The wind rose in the afternoons and nights were cold. But there was snow on the slopes facing the south and water was plentiful.

Transport was a problem. The charming tourism officials and the local wiseacres agreed that only an expensive private station-wagon could perhaps take me up dubious roads to near some high lake. I was fortunate in learning that the *laguneros* were AAPO people and thanks to this agency, the provincial water works, I was lucky to secure a ride in a lorry leaving for routine inspections of dams in the bigger lakes. The lorry left me at the Laguna (lake) Mina Illimani (*c*4400m), above which rose the imposing rock mass of Cerro Mina Illimani, 5040m (clearly, Hoek's 5300m Cerro San Fernando). Having obtained recent maps, I had already accepted that names and heights from the sketch drawn by Hoek in 1903 would no longer be valid. The charts issued in 1968 by the Instituto Geográfico Militar de Bolivia at a scale 1:50,000 showed different names and figures and, once I was on the terrain, they did make sense.

From the lake I headed for an obvious col to the north of it. I ascended the gap, dropped to the other side and camped by the small Samani lakes. Having acclimatised first in the streets of Potosí (4060m) I had no problem with the altitude. Not so with the weather. The morning had been brilliant, if rather cold, but by the time I reached the gap clouds began to appear and

42. Cordillera de Potosí, Bolivia. Peaks of the Quimsa Condoriri group, SW side, with (R) Cerro Maucatambo, 4940m. (*Evelio Echevarría*) (p162)



43. One of the small Samani lakes and the SW side of Cerro Mina Illimani, 5030m, in the background. (*Evelio Echevarría*) (p162)

by evening I was experiencing the most sensational thunderstorm of my life. The very ground under the tent seemed to tremble with the explosions overhead. The heavy rain that followed was no doubt very much welcomed by the people of Potosí, who love to know that their mountain lakes are full to the brim.

On the following morning, 7 May, I resumed explorations. My intention was to begin where the Germans had left off in 1903, that is at the Mina Illimani pass. The gap I had crossed was clearly not the right one, since it was wide and easy, and the Germans had described theirs as not easy to locate and to cross. I retraced my steps to the col and from there I ascended a rock dome which I christened Cerro del Abra ('Gap Peak'), 4940m. Marching thereafter around the lake Mina Illimani, I headed for a lateral valley south of it where I camped by a small stream. On 8 May I attempted Cerro Yuraj Yuraj ('White-white'), assuming that from its top (4920m) I could obtain a sight of Hoek's pass, situated somewhere in those surroundings. The previous night had been very cold and windy and now, as I climbed the W gully of the peak, I was facing a wind of almost gale force. I climbed the SW or lower summit, but I knew that if I were to attempt to traverse the ridge to the main summit I would be blown from it. I descended to the camp.

The next day was warm, there was no wind and I anticipated a pleasant climb. I struck out for the big peak of Jatún Casa (5023m), whose red-brown rock pyramid glowed like a furnace at sunrise and at sunset. The mountain had very large boulders of sound rock, which called for upward pulling by sheer arm strength. On the summit I found, to my surprise, a very well-built cairn. I was soon to learn that the surveyors of the Instituto Geográfico Militar de Bolivia, when charting the range in 1956, had performed a number of ascents. For whatever reasons, when I visited the Institute's offices in La Paz, its personnel were not willing to disclose to me the names of the peaks that had been ascended, so for the time being I have to restrict the list of their ascents to what I myself was able to discover. The view from Jatún Casa, if not really attractive, was certainly the most extensive I had ever beheld. The bleak plateau of southern Bolivia stretched before me, with a number of semi-volcanic peaks rising above the brownish vastness. Conspicuous to the far south was Cerro Chorolque (5603m), said to have mines near its summit. The nearer landscape confirmed Hoek's opinion: the southern half of the Cordillera de Potosí was not as well populated by rock peaks as the northern half, or Cari Cari, was. There was snow only on the S face of the bigger peaks and none in the valleys. Lakes of varying sizes were seen everywhere. But I could not discern traces of Hoek's pass.

The following morning I was preparing to descend to Potosí to re-supply, when two Indians herding a couple of laden donkeys went past my camp by the stream. One was a young man and the other a much older woman, picturesquely attired in red, pink and blue-layered skirts. I was amused when the man, unceremoniously and without saying a word, examined and

felt with his hands all my belongings, one by one. The woman stood silently watching. When they were about to leave I gave them a present of apples and oranges, which the highlanders greatly relish. The woman muttered a sort of Quechua *Oh la la*! and they were on their way. I watched them with great curiosity, wondering where they were heading for; I knew much too well that the end of the valley was enclosed by a ridge of very broken rock connecting Yuraj Yuraj with Jatún Casa. To my amazement I saw the two of them with their donkeys crawling and zigzagging up rocks and gullies until finally they reached the crest and disappeared. Only then did I realise that this was the pass which had made the 1903 Germans so apprehensive, but which they finally did cross.

Back in Potosí I learned that the AAPO engineers were sending another lorry, this time to the northernmost lakes, for another routine inspection. It was a unique chance to visit an area never seen before by any mountaineer, so I gratefully accepted their offer of a ride. Over a road of firm gravel, the lorry skirted slope after slope until it finally began to gain height when the road climbed up a narrow valley. At a string of lakes it came to a stop. I was surprised to see two other lorries there and a group of engineers and workers engaged in cleaning lake beds and repairing dams. Here at last I met a fellow mountaineer, something unheard of in the entire provincial department of Potosí (thrice the size of the Netherlands). Young and kind engineer Santos Vargas told me that, for purely sportive motives, he had climbed the highest peak in sight and the two descending northwards from it. Unfortunately I had arrived when he and his crew had to begin work, and thus I missed my only chance of a companion.

Alone, I headed for a gap at the end of the valley, located between a square rock peak to the left (east) and a row of other peaks to the right. I could see no snow, but I was now facing the barren and broken northern slopes of the range. By afternoon I had crossed the gap and gone down the other side, to the San Ildefonso valley, where I camped at around 4400m. The weather was very good now and remained so until my return to Potosí, but nights were getting increasingly colder (as the dry Bolivian winter progressed) and liquids that I kept inside the tent always froze solid at night. In the following days, 15 and 16 May, I ascended three peaks: first the truncated pyramid of '5020m' by its slightly exposed SW ridge. On its summit there was another military cairn, but since the peak had no known name I christened it Cerro Puca Punta ('Quechua' for red, Spanish for 'point', hybrid names being common in Bolivia). I then traversed north to the massive square block of Cerro Cari Cari (5040m). Once on the eastern slopes of the peak, in the last steep 50 metres, a long piece of blue string attracted my attention. It was a piece of fishing line left there by Vargas to mark his retreat at the trickier places. On the summit I found a roll of the same fishing line, Vargas's only momento of his visit, together with a well-built cairn with a metal disk affixed to it which read 'Instituto Geográfico Militar de Bolivia. 13 de marzo de 1956.' Mine was probably the third ascent. The next day I also ascended the N buttress of Cari Cari (*c*4920m), which I named Cerro Yana Punta, or 'Black Point'.

With this the fortnight I had allowed myself for my visit to the Potosí district came to an end. I returned to the imperial city, quite satisfied with the results of my modest expedition. It had yielded only two first ascents, but also the satisfaction of making first-hand contact with the manifestations of history, both in Potosí and in its Cordillera, and I had gathered practical information about a range that had gone unnoticed by mountaineers for more than 80 years.

**A traverse in 1993**

There were times, in the past, when I used to wonder what the future held for the Cordillera de Potosí. Its peaks, albeit rocky in comparison with the other mountains of southern Bolivia, present only minor mountaineering problems. The range is therefore more suited to the high-level mountain traveller rather than the gymnast. With easy access and heights still within my capacity, the peaks of that Cordillera, which seemed to attract no one else in the world, were almost ideal for me, the more so considering that I had a rather heavy rucksack and 67 years of age to carry on my back!

When I arrived in Potosí in late April 1993, I felt quite depressed when I saw the brown cliffs above the city now devoid of snow. But Bolivia, like many other parts of the world, has been hit by the drought that began in 1987 and continues to the present. As for the city of Potosí itself, in comparison with 1985 it showed some improvements. There were two new hotels, one new restaurant and money could be exchanged easily. Tourism was evidently on the increase.

More realistic than on my previous visit, I visited the headquarters of the Andacaba mine, and its chief engineer, señor Luis Bottani, gave me a ride in his car to the mine itself, located at 4400m in the SW end of the range. From here I marched south to locate the old mine. It was abandoned. I crossed the ample saddle (*c*4500m) between Hembra de Andacaba and Cunurana and dropped down the other side into the Muyucocha valley. It was bleak and narrow, dotted with tarns and walled in on its E side by black cliffs. My stay in the Muyucocha was not very productive. The weather was changeable. It snowed repeatedly each day for periods of up to two hours and the wind persisted for most of the day. I found several abandoned miner's huts, which were excellent as shelters. Built of stone, they were ample and clean. I lodged in one of them for three days and managed to ascend Point 4940m, north of Hembra de Andacaba. I christened it Cerro de la Mina ('Mine Peak'), for it rose NE of the new Andacaba mine. From the top I traversed south to the summit of Hembra de Andacaba (4980m), which had a big cairn on it, evidence of several previous ascents. This mountain is rocky and steep, but not difficult. I also made several attempts on Cunurana, but the wind and sudden outbursts of hail and snow chased me down.

Since the weather was so unstable I judged it useless to prolong my stay in the southern portion of the range and I decided to carry out my project of traversing the major part from south to north. On 1st May I crossed the Casiri pass and went down into the Casiri valley. The unclimbed chain of

44. Henry Hoek, 1878-1951, was the first and main explorer of the Cordillera de Potosí. (*Reproduced by courtesy of Henry Hoek's stepson Peter Walluf of Frankfurt-am-Main*) (p162)

the Huara Huara peaks (4900m), dark and sombre, looked very imposing to the east. Their W wall, which I was now facing, did not look feasible. I pressed on to the base of the Jatún Condoriri massif, where I hoped to do some climbing.

From a camp near the big Sipuruni Lake I climbed, on 3 May, black Point 5000m, north of Jatún Condoriri (5008m). It had a cairn on the top, probably built by surveyors, but since the mountain was unnamed I baptised it Cerro Cóndor Negro. The ridge to the summit of Jatún Condoriri looked too long and serrated, so instead I headed north to Point 4966m. Its summit had no traces of human visitors but I had noticed a small horseshoe-shaped construction just below it, so mine may have been a second ascent. All the same, the peak was unnamed. I christened it Cerro Sipuruni, after the lake it dominates. This system of placing camps anywhere and climbing what I wanted or what I could was very satisfying and, since I was alone and rarely saw traces of human life, it gave me a unique sense of ownership of the entire range.

As I continued to march northwards the weather gradually improved. On 4 May I didn't even wear a sweater. I crossed the rolling Jacha Molino Pampa and descended into a sheltered valley, called Chipuruni on the map. It was the pleasantest nook I had found in the range, with a wide brook and a few dwarf blue and yellow lupins here and there. The following day, my ninth in the range, I climbed the Jatún Cassa pass (*c* 4800m), thus connecting the southern half of the range I had just traversed with the area I had visited in 1985. From the pass I turned left (west) to ascend the rocks of an easy ridge peak, called on the map Cerro Quellu Orco ('Yellow Peak', 4960m), a first ascent. I was enjoying unusual warm, dry weather.

My next step was to ascend the Mina Illimani pass, from which I had a great view of my next goal, the northern half of the range. Several peaks of very striking outline hinted that I was in for a pleasant climbing campaign. But by that day I was quite spent. So I judged it better to abandon the traverse of the range, descend to Potosí for a rest and spend the rest of my allotted time climbing among the Cari Cari peaks. The return journey was known to me: the Mina Illimani, where two geologists gave me a ride in their station wagon, the dry San Ildefonso valley and finally the city itself.

On 10 May I returned to the range in very high spirits. In another mining vehicle I arrived at the same Lake San Ildefonso, this year reduced by drought to half its normal size. From its shores I marched up the valley, crossed the Quespi Llacta gap and descended east into the valley of the same name. I explored the peaks of the neighbourhood, noticing that cairns existed on the summits of two of them. I then headed for the Matterhorn-like Point 4940m, situated north of the gap. Since it did not look easy, I assumed that it would be a first ascent. It was not. Climbing over excellent rock, at times quite steep, I arrived on the summit and realised, to my astonishment, that it was a sanctuary. In front of a small cairn, two candles, one little plastic bag of coca leaves and two wine bottles were set out – clearly, an offering to a mountain divinity. A glance at the barren

scenery around the mountain told the whole story. It was no doubt an offering to Pachamama, the Mother Earth of the descendants of the old Incadom, to request an end to the drought which had afflicted their land for so long.

I added a few stones to the cairn and placed into it a protected *gipfelbuch*, having also stated on it the name I had chosen for the peak: Cerro Maucatambo. On the official Bolivian maps, Point 4940m bore no name; but in his writings Henry Hoek said that he had discovered the name of Maucatambo for 'the splendid rock mass' of that area. I also did something disgraceful. I took for myself some of the objects the hillmen had left for Pachamama. I took possession of the two small candles and the bag of coca leaves, with the innocent intention of donating these objects to the museum collection of my own mountain club. Now I know that I should not have done so.

I descended and slept in my small tent and the following day I moved to the Cari Caris, possessed by the same ambition that gnaws the heart of every peak-bagger. So far, the weather had been acceptable, but that night the wind rose and from then on it never relented.

Should mountaineers be superstitious? When one comes face to face with a firmly-established myth, what is one to do? Having read the excellent *Kulu and Lahul* by General C G Bruce (Arnold 1914), I wholly agree with him: myths, beliefs and superstitions are to be taken seriously and respectfully, even though one's first reaction may be incredulity or amusement. I had taken offerings which had been made to the Indian Mother Earth and for the rest of my expedition I paid the price. An unfinished programme was one part of it; unbearable weather was the other.

On 12 May I crossed three passes, traversing slopes horizontally in order to find a way to the N side of the Cari Caris. Throughout the day I was harassed by a devilish cold wind. Skies were grey and decidedly hostile. Once I had reached the third gap I realised that it would not pay to camp below it. The descent into the Jatún Tío valley would have meant a loss in height I was unwilling to make. I slowly retraced my way back to the San Ildefonso valley, where I camped on a small ledge protected from the persistent wind. The following day was equally unpleasant but I set out all the same for conical Cerro Jucuni (4920m). I had seen from below that it was crowned by a cairn; it was, however, my only chance of a short climb. When I reached the top the first thing that caught my attention was a big candle sticking out from the cairn itself. Another sanctuary, but this time I respected it and after depositing the usual summit register I hurried down. I arrived in my camp exhausted and numbed.

My stay in the Cordillera de Potosí had to be cut short. The winds were growing colder and stronger every day – proof that Pachamama was against me and I was not wanted there. From my tent, perched on the ledge, I could hear the mountain gods sounding the charge. That same morning I dismantled my camp and began a hurried descent. In the afternoon I was marching alongside the San Ildefonso Lake and before dark I was back in my hotel room.

Somewhat too soon, my Potosí adventures were at an end. Hoping to gain a last view of the range, I had reserved the afternoon before my departure from Potosí for a visit to a hill above a steep street end. The sky over the city was overcast and when I reached the viewpoint and searched for the peaks, nothing could be seen. A curtain of fog had solidly settled on the brownish foothills. I looked in amazement at the dismal scene and reflected how the steppe surrounding Potosí, now deprived of its unusual rocky crest and crown, looked very much a part of the Bolivian southern plateau. It seemed as if beyond the foothills there was only a void filled by swirling mist and fog. Nobody could have guessed that, somewhere behind the clouds, there rose a craggy, lonely mountain range.

ACKNOWLEDGEMENT

I am grateful to Mr Peter Walluf, who kindly lent me a photograph of his stepfather, the well-known climber and skier Henry Hoek. I located him by writing to the Postmaster in Vaduz, where Henry Hoek died, and asking if there were any 'Hoeks' in the city listings. The Postmaster gave me Peter Walluf's address in Frankfurt-am-Main (FRG) and enabled me to obtain, at last, a photo of an admired pioneer (*Plate 44*).

BIBLIOGRAPHY AND CARTOGRAPHY

The following bibliography is believed to be complete, but only the latest maps are recorded.

Luis Capoche, *Relación general de la villa imperial de Potosí.* Madrid: Biblioteca de Autores Españoles, 1957. (First published in 1585)

Henry Hoek, 'Explorations in Bolivia' in *Geographical Journal 25/5*, 498-513, 1905.

Henry Hoek, 'The Cordillera de Potosí' in *AJ23*, 19-30, 1906.

Henry Hoek, 'Bergfahrten in Bolivia' in *Zeitschrift*, Deutscher und Oesterreichischer Alpenverein 38, 121-148, 1907.

Henry Hoek, *Aus Bolivias Bergen.* Leipzig, F Brockhaus, 1927.

Henry Hoek, *Por las montañas de Bolivia.* Madrid, Bruno del Amo, editor, 1929.

Henry Hoek and Gustav Steinmann, 'Erlauterung zur Routenkarte der Expedition Steinmann, Hoek, v. Bistram in den Anden von Bolivien 1903-04' in *Pettermans Geographische Mitteilungen 52/1*, 1-13, 1906.

William Rudolph, 'The lakes of Potosí' in *Geographical Review* 26/4, 529-554, 1936.

**Maps**: Instituto Geográfico Militar de Bolivia, La Paz, *Hojas* (sheets) 6435-II (Potosí) and 6436-I (Puna), scale 1:50,000, 1968.