

NOMENCLATURE IN THE KARAKORAM: *A paper read at  
the Afternoon Meeting of the Society on 12 May 1930, by*

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THE title announced for this discussion was "Nomenclature in the Himalaya." This was perhaps a little misleading for two reasons. In the first place there is undoubtedly some difference of opinion as to what comprises the Himalaya—where they begin and where they end—and how far north they extend. In the second place, it seems to me quite useless to discuss the nomenclature of a region without first considering its physical features. This is especially necessary in the Karakoram region because it is only in the last three years that the results of all modern surveys of this region, dating since Longstaff's discoveries of 1909, have been incorporated on our Survey of India maps, and even now some of these maps are not available to the public.

People have written to me during the last few months giving me their views, yet admitting at the same time that they "have not been able to refer to modern maps." Others seem to have assumed that the old maps of the Karakoram region made by the Survey of India during the early 'sixties of last century were made with the same accuracy as those of the nearer ranges of the Himalaya, regardless of the facts that they were done under special and often hurried circumstances, and that our surveyors were instructed not to waste time surveying barren land above an altitude of 15,000 feet. I hope to convince some of you this evening that we know more about the mountains of the Karakoram to-day than did our predecessors of seventy years ago; and that this knowledge forces us to modify the views then held.

The region concerned is bounded on the south by the trough of the Indus-Shyok, which is roughly parallel to the Ladakh range; and this range is itself parallel to the axis of the Great Himalaya. These two great ranges have been traced out by Sir Sidney Burrard in considerable detail in his 'Sketch of the Geography and Geology of the Himalaya Mountains and Tibet,' and though there are still considerable blanks in our knowledge of the details of these two ranges, there is nothing controversial in their general alignments. Sir Sidney Burrard traces both of them from the Indus on the west to the Brahmaputra on the east, and names them on the frontispiece to his 'Geography,' the "Great Himalayan Range" and the "Ladakh Range" throughout their lengths.

On the west of the Indus there are some difficulties in tracing their extensions; and Colonel Morshead, Kingdon Ward and others have discussed the possible extension of the Himalayan ranges east of the Tsangpo gorge. Morshead writes: "Does the Great Himalayan Range turn suddenly northwards through Gyala Peri and Makandro, or does it maintain its easterly direction with diminishing elevation through the satellite peak of Sanglung (23,018 feet), subsequently perhaps resuming its existence in the unexplored regions of Poyul?" And he goes on to say that the topographical evidence is incomplete, and that the problem is one which demands geological as well as further geographical investigation. These questions do not concern us here, and I only mention them as showing that such problems exist.

North of the Indus-Shyok trough, the parallelism of the ranges with the

Great Himalaya and Ladakh ranges is not evident. In Burrard's 'Geography' he shows two ranges—the Kailas and the Karakoram—from about longitude  $72^{\circ}$  to  $78^{\circ}$ , approximately parallel to the Ladakh range. With a break from  $78^{\circ}$  to  $80^{\circ}$  the Kailas range is continued parallel to the Ladakh range through the sacred mountain of Kailas and onwards to longitude  $92^{\circ}$ . The Karakoram range is shown parallel to this and, with a smaller break near longitude  $80^{\circ}$ , is continued across the Tibetan plateau, though diverging northwards out of true parallelism. East of longitude  $79^{\circ}$  this northern range is given no name. I understand that since the book was published in 1907 Sir Sidney Burrard's views have been modified and that he no longer considers that the mountain Aling Kangri is on the main Karakoram alignment.

It was, I think, very natural in 1907 to show the northern ranges parallel to those of the south. The extraordinary parallelism of the southern ranges was a powerful argument in favour of this theory, and we were perhaps rather inclined to emphasize this parallelism in the drawing offices. This has resulted in the Kailas range being continued across the two deep valleys of the upper Shyok and Nubra, in a direction almost at right angles to the visible direction of the ranges.

The name "Karakoram" has undergone some curious contortions. There is no doubt whatever that in this region it originally belonged to the pass, and that it is confined by the traders to the pass to-day. From this pass it was first given generally to the unexplored watershed between the Tarim basin and the Indus drainage; and so was carried westward along the watershed to the great range of snowy peaks, known to the traders at that time and to-day as "Muztagh," or Ice-mountains. I wish to emphasize this point: that the name "Karakoram," however well known it may be for the pass, is not now and never has been given to these mountain ranges by any one but Europeans. All the traders in these parts use descriptive names for localities. "Muztagh" is the word they use descriptively to denote ice-mountains, and I am quite prepared to believe that where Turki is spoken there are other Muztaghs, just as there are other Karakorams. In the small vocabulary of illiterate people there must be repetition. But "Karakoram" is used for the disintegrated regions below the snow-line; "Muztagh" for the mountains that rise above that line. The Karakoram pass is below the snow-line. The southern disintegrated slopes of Muztagh Ata—the father of Ice-mountains—are known as "Karakoram" below the snow-line. The fact that Muztagh Ata does not lie on the range we are discussing has been used as an argument against the range name "Muztagh." The same argument must surely apply to "Karakoram."

Since the word "Karakoram" was first applied by Europeans to the watershed range, there has been a great accumulation of knowledge. Sir Sidney Burrard tells me that early in the last century the Kunlun and the Karakoram were considered one range. Hayward, who first explored the upper Yarkand tributaries—though he did not reach the sources—separated the Kunlun from the southern ranges, or rather from a single southern range, which he called "the Muztagh or Karakoram"—"Muztagh" being the name given him by the traders, and "Karakoram" the name then coming into use among Europeans. On his map he showed tributaries from this single range flowing northwards into the Yarkand river. It was Sir Francis Younghusband who, in 1887, first dis-

covered the Aghil range which lies north of the main Muztagh range, and south of the Kunlun.

Meanwhile the surveys from the south, based on triangulation, had not reached the main watershed in the region of ice, though the limit of the surveys was believed to be the watershed and was shown so on maps. Burrard, in the frontispiece to his 'Geography,' naturally showed the Karakoram range according to this supposed watershed-alignment north of and only some 15 miles up the Siachen glacier, and, continuing it parallel to the Ladakh range, he took it across the upper Shyok, and not through the Karakoram pass. For some reason I cannot trace, the small-scale maps of about the same date (and until the war) showed the name "Karakoram" bending north-eastwards to the Karakoram pass, and not according to Burrard. On Survey of India maps, published after the war, owing to Colonel Wauhope's views, the name "Karakoram" was made to neglect the Karakoram pass, and was brought the whole way down the watershed between the upper Shyok and Nubra, thus cutting the alignment of the Kailas range, as shown on small-scale maps, completely in two.

During the last few years all these maps have been redrawn by the Survey of India, and we have included the many valuable surveys carried out by private explorers, with several of whose expeditions the Survey of India has attached trained surveyors. But neither the explorers nor the surveyors have brought back any names for the ranges, and they have used the term "Karakoram" more and more loosely. When drawing the maps we have been placed in the difficulty of putting the old range names along the alignments as surveyed in detail. For we find that the alignment of the names as handed down to us does not agree with the alignment of the ranges as surveyed.

A few years ago I layered a map on the 1:1,000,000 scale, on which I had put all modern surveys and heights. As far as possible I persuaded travellers to fill in the gaps in our knowledge, and when they came back, I put their results on to this rough map of mine. After my own expedition in 1926 I made another layered map, and during my spare time during the last few months I have made a third which you see before you.\* This is layer-coloured as follows:

12-14,000 feet	..	..	..	..	..	dark green
14-16,000	„	..	..	..	..	light green
16-18,000	„	..	..	..	..	yellow
18-20,000	„	..	..	..	..	pink
Over 20,000 feet	..	..	..	..	..	dark red

I do not want to emphasize the fact that all the country shown yellow, pink, or red is at least 1000 feet above the area the old surveyors were required to survey rigorously; because some, notably Godwin-Austen, paid little attention to that instruction. But this map shows clearly how much more we now know of the physical features of the region under discussion. It includes the surveys done during the Visser expedition of last year, and I have left blank the area of guesswork which I hope the Vissers will fill in this summer.

I have not added much original exploration myself to this great region; but I have examined a great deal of it on the ground; I have read and re-read the

\*This map is in process of fair-drawing and will be laid in proof state before the proposed conference.—ED. G. J.

descriptions of, I believe, all travellers who have visited it; and I have interviewed many of them personally. I have therefore often been consulted by the officers in charge of the drawing and reproduction of our maps of this region in India concerning the application of the range names.

I find that very few travellers in their writings have in recent years used the term "Karakoram" in the same sense, and no two existing maps drawn by different offices show the name "Karakoram range" on the same alignment. The views of our past experts in the Survey of India are not identical, as is natural when one considers that they studied material that was constantly becoming more accurate. But I have seen no published map that brings out the salient features of the area so well as this one.

The one important feature that "hits the eye" is the great Nubra-Siachen trough, at one time filled by a great glacier from its northernmost point (nearly 30 miles north of the watershed shown on the old maps) right down to its junction with the Shyok. This trough appears to be a prolongation of the Shyok itself, and there are indications of it having once continued by the Urdok glacier into the Shaksgam.

Next to this feature we see the great mass of the main snowy range. From  $K_2$  it passes the Gasherbrum group, cuts across the Urdok-Siachen trough, and passing the Teram Kangri group, continues down to the Saser pass and the great peaks of the Nubra-Shyok divide.

The third feature is the Rimo-Upper-Shyok trough, east of which—especially towards the south—surveys are less detailed and not accurately contoured.

The Hushe and Kondus areas and those south of Masherbrum I have left uncoloured, because we have no contours and insufficient heights to go upon. There are undoubtedly great groups of peaks, but it is extremely difficult to place them in any range alignment.

North of the Gasherbrum-Teram Kangri ridge lies the Shaksgam and the ranges of the Aghil—rocky and difficult, but not continuously above the snow-line; and eastwards of them the comparatively insignificant Central Asian watershed by the Karakoram pass, easy to cross at all times of the year and petering out on the Kushku Maidan, the Aksai Chin, and the Lingzitang. On this last insignificant feature lies the Karakoram pass.

Our difficulty is to name these features on the map. On the main alignment of ice-covered peaks, known to the only people who see it as Muztagh, we have two well-known, though little-used passes, both called "Muztagh," and we have the well-known Saser pass on it farther south. The range, when only one was known, was called "the Muztagh or Karakoram" range by several of our predecessors. If therefore we give a range-name to this great alignment of ice-mountains, it seems, in my opinion, only right to call it the Muztagh range. And the name has the advantage that it would be understood by all traders using the trade route. If we decide to name the watershed and ignore the great Saser mountains, we may write Karakoram range along that insignificant watershed and extend it to the ice-mountains farther west. But since Turki names are all descriptive, I believe we shall never get the trader to follow suit. Muztagh is *their* traditional name, and they do not use our maps.

Whichever we do, we are faced with the problem of the southern range of the Karakoram. Sir Sidney Burrard (following, I believe, Alexander Cunning-

ham) placed the name "Kailas" along it. If we adopt Wauhope's alignment for the "Karakoram range," we cut this "Karakoram Kailas" off from its very problematical eastern extensions which are the only excuses for its name. I do not know from personal observation either the sacred Kailas north of Manasarowar or the Lesser Kanawar Kailas, but they exist and are well known to Hindus. Must we add a third Kailas, which is not Hindu, has nothing in common with either of them, and is, as Dr. Longstaff holds, much more closely allied to the Karakoram range?

North of the main watershed we have the Aghil mountains, which, in my opinion, are also very closely allied to the main Muztagh range. I doubt whether they are anything more than parallel outer ranges of that main range. Their parallelism is very marked. But they introduce us to an entirely different region—a region of disintegrated rock, red marbles, black limestones, and sandstones and shales, containing Jurassic fossils, and lastly red sandstone. It is a region of little rainfall compared with the main range, Tibetan in climate, and with Tibetan fauna and flora.

All these ranges have been included by various travellers in the Karakoram area, yet the same parts have been called by different travellers "Eastern Karakoram," "Western Karakoram," and merely "Karakoram." Sir Sidney Burard advocated stopping the name "Karakoram" westwards at the Hunza river, the alignment farther west being denoted by the name "Hindu Kush," and this plan seems by far the best to adopt, though a recent traveller included the mountains bordering the Batura glacier in the Karakoram system. In searching for some sort of order in applying the range names to this area, I concluded that it would be best to call the whole region bounded by the Hunza river, the Indus, the Shyok, and the Raskam-Yarkand rivers "the Karakoram Himalaya," and to define the separate ranges by the names "Kailas," "Muztagh," and "Aghil." To distinguish the Kailas range from the others of the same name, I proposed to add "Karakoram" to it, and to indicate the grouping of all three ranges as a unit, I proposed to do the same with the other two.

These views were published as long ago as 1927 in the *Geographical Journal* and raised no protest. Before reprinting them in a Survey of India publication two years later, I naturally placed them before the Surveyor-General of India, who agreed that as so many explorers and geographers interested were resident in England, it would be well to ascertain their views with the aid of this Society.

The nomenclature I proposed was the best I could find that would introduce some systematic nomenclature out of the existing chaos. I do not believe "Karakoram" is a correct name to use descriptively for a mountain range, which lies throughout its length above the snow-line, but it suits a mountain region. I have tried to compromise by giving it definitely to the region, where it has more and more in latter years been applied.

If we retain "Kailas" for the southern range, I see no alternative but to distinguish it from other Kailases by adding the word "Karakoram." Similarly, if we use the word "Muztagh" we should use the name compounded with "Karakoram," to distinguish it from other Muztaghs: and if the Aghils are accepted in the Karakoram region, I see no objection to them following the same system.

I am not in love with compound names, but I fail to see why they are considered unsuitable. Muztagh-Karakoram is no more cumbersome than

Bernese Alps or Nepal Himalaya. I have been using these compounds of mine for three years now and find no difficulty or objection to them, whereas I found the previous nomenclature most awkward.

There remains the solution proposed by Dr. Longstaff. He wishes to abolish Kailas from this region altogether. I agree with him in that. As I understand him, he intends to stick to the name "Karakoram" for the region but to name no ranges, except on small-scale geographical maps. On topographical maps he would label the mountains by groups. This system has many points to recommend it, but is it not rather more complicated than the system I have proposed?

### DISCUSSION

Before the paper the PRESIDENT (Colonel Sir CHARLES CLOSE) said: Major Kenneth Mason is going to give us a paper on the nomenclature of the Himalaya. That paper depends chiefly on new information which most of us, in fact, have not got, information which has been derived from the labours of recent explorers and the work of the Survey of India. Major Mason is a distinguished officer of the Survey of India, and it is on that new information that his paper will depend.

This question of nomenclature is one which has been disputed from time to time, but we always feel that it would be very advantageous if general agreement could be come to as to the names of Himalayan ranges, passes and so on, especially for the benefit of those who use maps. I have looked up the subject of this paper in the beautiful atlas of the Italian Touring Club and find it difficult to follow the paper, the reason being that much of the information is new. We are anxious to hear Major Mason, so I will not detain you any longer, but ask him to begin.

*Major Mason then read the paper printed above, and a discussion followed.*

THE PRESIDENT: We are very glad that Sir Sidney Burrard was able to attend, and we should like to hear what he has to say on this subject; he has been quoted a good deal during the course of the lecture.

SIR SIDNEY BURRARD: Nature has provided Tibet with three primary ranges: Himalaya on the south, Kunlun on the north, and Karakoram the central backbone. I ask the Royal Geographical Society to save this primary classification. It is impossible to discuss secondary ranges and names until the primary foundation is fixed.

The Royal Geographical Society has always upheld the principle that geographical names should be chosen in the interests of the people of the country. May I ask this question: Who are the people whom this meeting has to consider? West Tibet abuts against Chinese Turkistan on the north. The Karakoram mountains stand in Tibet. The Tibetan population live on the south side of the range; the northern side is uninhabited. By the last census there are 178,000 residents who speak the Tibetan dialects. The number who speak Turkistani is less than 1000. So when I ask who are the people, the answer is: The Tibetans, not the Turkistanis.

Our old explorers, who explored the Indus valley south of the mountains, always brought back the name Karakoram for the mountains. Those few who went north of the mountains brought back the name Muztagh. The Tibetan pundits use Karakoram; the traders from Turkistan say Muztagh. Similar divergencies are to be heard in India. Afghan traders and Tibetans come into India in the winter, and if we ask them about mountain names, they do not agree with the Indians.

Major Mason has contended that the British explorers took the name Kara-

koram from the pass and gave it to the mountains; he argues that the name Karakoram mountains is a British introduction. He has produced no evidence of this. I ask him to produce his evidence. For it is upon this that he has condemned the name Karakoram. As far as I know, all evidence goes to show that the name was given both to the pass and the mountains long before British explorers went there. We cannot tell how the name originated. It is not a Tibetan word. Throughout history the Afghans have cherished the name Hindu Kush for their mountains, but neither of the words "Hindu" or "Kush" are Afghan. The history of Tibet is unknown. Marco Polo gave us one short glimpse into the past. In 1300 A.D. he said: "Tibet belongs to the Mongolian Khan." So conditions were different. The Mongolian capital was Karakoram, and, by a coincidence, the road over our Karakoram pass was the Karakoram road from India. This is no proof of the origin of the name, but it shows how unsafe it is to speculate about origins. We only know this, that the present Tibetan population has been slowly absorbing the name.

Moorcroft was our first explorer to introduce the name "Karakoram mountains" into modern geography. He did not go to the Karakoram pass. May I read you one sentence from his diary dated from Tibet, 1820: "Although I am unable to visit the countries which intervene between Kashmir and the Karakoram Mountains we had frequent opportunities of communicating with the natives of those regions and gained from them various notices which may not be unacceptable. It appears that those countries which lie along the foot of the Karakoram Mountains are . . ." and then he gives a list of names which is to-day quite correct.

Having read Moorcroft's diary I cannot believe that its author took the name from the pass and gave it, of his own initiative, to an immense mountain chain, without saying that he had done so.

In 1846 Cunningham followed in Moorcroft's tracks. He explored the south side of the Karakoram. He found the name applied to the mountains. It never entered his head that this name had been given to the range by the previous explorer.

Cunningham was followed in 1855 by Montgomerie, who spent ten years in triangulating Tibet and who had numerous observers over the country. Members of his party heard the name Muztagh used near the Tibet border and amongst their Turkistani followers, but they heard the name Karakoram in use on the south side. In those ten years no member of this large party ever suggested that the name Karakoram had been given to the mountains by British explorers. Mason wishes to introduce Muztagh, but he is doing the Turkistanis no service, for we have already given this name of theirs to the highest mountain of Southern Turkistan, and Stein has named the range of Western Turkistan the Muztagh Ata range.

Major Mason wishes also to introduce the compound name Karakoram-Himalaya into Tibet. In 1847 Cunningham gave a simple definition which fitted the ancient Sanskrit name into modern science. His definition was this: "The Himalaya Mountains form a natural boundary between India and Tibet." The Royal Geographical Society and the Survey of India have accepted this definition. Three presidents of the Royal Geographical Society have laid down that the name Himalaya should not be extended across the Indus into Tibet. The Indian Survey has never taken the name into Tibet. Colonel Ryder observed many high peaks in South-Eastern Tibet, but he never spoke of the Lhasa Himalaya. Sir Aurel Stein never spoke of the Kunlun Himalaya.

The Linguistic Survey of India has shown that there are races of men like the Gurkhas who are Himalayan and who are neither Indian nor Tibetan nor half-

breeds. The geologists also have their Himalayan zone and their Tibetan zone. Our geographical sub-division of Tibet ought to provide a basis for other branches of science

In every science there must be uncertainty when we pass the limits of exploration. But uncertainty need not mean confusion. To introduce such a name as Karakoram-Himalaya must lead to confusion, as it destroys the individuality of both the primary names. The double names will not be acceptable to other branches of science. And when you consider that this double name Karakoram-Himalaya is to be connected in Tibet with another new double name, Muztagh-Karakoram, surely you cannot agree to place such an unfair incubus upon the Tibetan people.

Sir FRANCIS YOUNGHUSBAND: I must confess I should like that part about the Muztagh pass to be called the Muztagh-Himalaya. When I went across in 1887 the name Muztagh pass was known and the natives used to speak of the mountains which that pass crossed as the Muztagh mountains. I have always disliked the name "black gravel"—for that is what Karakoram means—applied to those exceedingly high and snowy peaks where there is no black gravel at all, whereas one can understand the region about the Karakoram pass and the region to the east being called Karakoram because it is nearly all disintegrated mountain. I would certainly support Major Mason's views and say that when you go to that region round K<sub>2</sub> you are going to the Muztagh-Karakoram.

As regards the name Aghil range, I named that myself after the Aghil pass. When I went across there the people called the pass the Aghil Dawan. I applied the name of the pass to the range. And Aghil range has been accepted as the name of that range and is generally acceptable. As I say, I should like, for my part, to support Major Mason.

Dr. T. G. LONGSTAFF: What we want is simply to try and find out what is the most convenient nomenclature. Of course the whole thing is a mere convention. We did not make the mountains. We found them there and, having found them there, in order to describe them we want to place labels on them.

Some of those present may have read what I wrote in the *Geographical Journal* in January 1930 (vol. 75, p. 44), and I think I may possibly have influenced Major Mason in suggesting the use of the label Karakoram-Himalaya. I have since realized that there are grave objections to the name Karakoram-Himalaya, and so far I should think we probably see eye to eye with my respected friend, Sir Sidney Burrard. I recommend the name Muztagh-Karakoram for the whole mountain complex.

Let me now endeavour to clear up the question of names. As to Karakoram, you will find in most books and gazetteers that Karakoram is stated to be the capital of the empire of Chingiz Khan, about 1000 miles from the Karakoram pass. Various authorities translate the word "Karakoram" as "black gravel," or "black rocks"—more probably it means black scree. If Sir Sidney Burrard will pardon me, I should like to say that Karakoram is just as much Turki as Muztagh.

Sir SIDNEY BURRARD: But it is adopted by the Tibetans, whereas Muztagh is not.

Dr. LONGSTAFF: Well, sir, with respect, I think that Tibetans never use that pass, and there must be very few Tibetans who use Turki words. Furthermore, they never use the word Kailas. Sometimes they call it Tise; sometimes Kang-ri Rimpoche, which means the sacred ice mountain, or lord ice mountain. The names Karakoram and Muztagh are both descriptive and both used in many places. There must be Central Asian travellers here. How many Aktash do they know? Where there is a white rock, that place is called Aktash. How many Kizil Rabat?

I am very keen on the historical side of this question. The first man whose writings are of practical interest to the mountaineer is G. T. Vigne, who in 1835—ninety-five years ago—was the first European to penetrate up the glaciers. I have here a map of his journey ninety-five years ago, and he speaks of the Muztagh. He went up to the Saltoro pass that Sir Francis Younghusband went to look for in 1888. Vigne puts “Mustak” on his map for the main axis of the complex and “Kara Kurum” in smaller letters beside the “Pass to Yarkund,” quite correctly indicating that the pass does not lie across the main axis of elevation (*vide G. J.*, 69, 1927, p. 329).

Sir SIDNEY BURRARD: It depends who he got his information from, whether Tibetan or Turkistan.

Dr. LONGSTAFF: From Baltistan. He went up from Khapalu to the Saltoro pass. When I went to Khapalu to ask about Vigne’s route Rajah Shere Ali Khan was quite familiar with the name Saltoro pass (*G. J.*, 35, 1910, p. 624).

Up to 1890 Vigne’s was the best map there was of the centre of the map now shown by Major Mason. Before Major Mason, Wood, De Filippi, the Vissers, or myself had made any explorations there Vigne’s map showed the Saltoro pass marked on the right place. As a matter of fact, Slingsby, Arthur Neve, and I were the first Europeans to get to it. I have here also the map (1890) illustrating the explorations of “Captain F. E. Younghusband, King’s Dragoon Guards, in 1888.” On this is shown the Saltoro pass with the head of the Saltoro valley—all correct. Now why has that name been expunged from the latest maps? It starts historically in 1835; it was so well known that Colonel Younghusband went to look for it in 1888, and we went and crossed it in 1909.

The PRESIDENT: Who changed it?

Dr. LONGSTAFF: Why, sir, the Survey of India. I said in my paper (*G. J.*, 35, 1910, p. 627) that I knew that quite locally the people called the glacier Bilafond and they called the pass Bilafond La; but Shere Ali Khan called it the Saltoro pass and the maps called it the Saltoro pass until the Bullock Workmans changed it and were followed by the G.T.S. You have really not a better authority than Vigne, the man who went to the Saltoro pass in 1835. Also it is the only *important* pass into or out of the Saltoro valley.

But to return to Muztagh-Karakoram: the trouble is that it is really necessary to have two systems of nomenclature (*G. J.*, 75, 1930, p. 44): a system for maps which are on a small enough scale to show the relationship with other ranges, so that you can get a sort of schematic idea, and then what I call a local system, such as we require in the Alps, a topographical system of nomenclature of different ranges. You see I am withdrawing altogether the suggestion Karakoram-Himalaya which I made earlier (*G. J.*, 69, 1927, p. 330). I think Major Mason has very kindly not exposed me to the extent he might have done. I see Sir Sidney Burrard’s point. I think he is absolutely right. The difference between the Himalaya and the Karakoram is so great that it would be a pity to mix them up. On historic grounds and on descriptive grounds I would like to see the word Muztagh restored, thus on further consideration going back on another suggestion of mine (*G. J.*, 75, 1927, p. 45).

One of my treasured volumes is a paper by Godwin-Austen of his travels in 1861 in the “Mustakh” range (*J. R. G. S.*, 34, 1864). As far as I know it is the first account of the actual glaciers, except for Vigne’s visit to the Saltoro glaciers and Henry Strachey’s visit to the lower Siachen glacier in 1848; but no one spent the time on the glaciers which Godwin-Austen did. He always called it the Muztagh range. So I think that with these really very authoritative usages respect for the historical record fully justifies the retention of the name Muztagh. If it were a case of voting I should vote for calling the whole complex between the

Hunza-Gilgit river, at any rate down to the Nubra Shyok, the Muztagh-Karakoram. I should like to see both elements of that nomenclature preserved. We must remember that our previous ideas of the structure of this range were not correct. Major Mason's map shows you that there is a definite continuous range from  $K_2$  running diagonally past that big white patch that Major Mason has left blank, down to the great bend of the Shyok river. I know that range myself—of course not all of it—and I particularly know the Nubra Shyok end of it. From the top of the map before us down to the very centre and below the centre, it is one continuous range of enormous peaks. There is no known crossing of the range by anybody for the entire length of that diagonal curve across the map except across the Saser pass. Younghusband's Saddle is up at the head of the Siachen glacier, and there is possibly a passage for travellers from the Siachen to the Rimo glacier, which I hope Dainelli will manage this summer. But there is absolutely a continuous range. It does not fit in with the old lines. I cannot approve the bottom part of it being connected by name with Kailas because it really has no connection. I also know the Tibetan Kailas well, and it really has no connection with it. I therefore suggest that for the entire complex of the system that we are speaking of there is good historical tradition and warrant for reviving Vigne 1835, Godwin-Austen 1864—I do not think he has had the credit due to him—and that we should call the whole complex the Muztagh-Karakoram. There will also be this advantage: that in small-scale maps for which it will particularly be used, Muztagh-Karakoram being written from left to right, the word "Muztagh" will come on the west and the word "Karakoram" on the east, and will connect naturally and remind one of the Karakoram pass, but I cannot insist too strongly, as I did here twenty years ago, that the Karakoram pass has not got any vital connection with the mountains that we are discussing, and I wish also to insist that any system of names used is merely a human convention of convenience, and nothing else. But do respect history and the nomenclature of early travellers.

As regards the parallelism to which I drew attention in the *Geographical Journal* for June, 1910 (vol. 35, p. 625), I wish again to draw attention to those four rivers, the Shyok, the Nubra, the Shiggar, and the Gilgit, all flowing backwards round the corner. They all must be really tectonic valleys; they cannot be valleys that have been excavated by glaciers, because they are the wrong way; they are scratched by glaciers; smoothed by glaciers; straightened by glaciers; but they look to me to be due to original tectonic folding. The Nubra and the Shyok flow down from the north-west to south-east and join a river which is flowing north-west. The Shiggar river does the same; and the Gilgit also. So that our old conception of the ranges being parallel to the Indus does not work when we are on the ground, because elevation has taken place in two directions. It looks as if the original line of elevation may have been, roughly, an east-to-west elevation which was then crossed by cracking along a north-west to south-east direction, so that there is a criss-cross pattern. No map has ever been made that shows so clearly as this one of Major Mason's that from  $K_2$  to the end of the bend of the Shyok there is an absolutely continuous range of mountains with only one pass, and that a glacier pass of 17,600 feet, namely the Saser, the lowest of all, and then, beyond to the north-west, the mountains run on beyond Hispar to Dasto Ghil, where the Vissers were, and right up to what is taken as the junction with the Hindu Kush. For the whole complex I do not think you can do better than use the label Muztagh-Karakoram.

I forgot to mention that I agree with De Filippi on the spellings Shayok and Rimu, and hope these will be seriously reconsidered.

Colonel C. H. D. RYDER: There are only two points I would like to make, one is that in making any change in the names in the area under discussion I hope

every one will be very careful. It is very much a No-man's land and the frontier has never been demarcated, and thus when applying names it is well to be very careful that you do not push, we will say, a name from Turkistan too far south, or push a name from Ladakh and that side too far north. The people, and even the Governments, of those or any other wild parts are very much inclined to attach great importance to a name when they are trying to claim more territory than they are really entitled to.

The other point is that I am always very much of a conservative, and the fact that a name has been current in a certain way for sixty years makes me feel very disinclined to go back to a name that may have been current before. It may even be a better one, but it would be very hard on those who have to learn geography if we in this room, a geographical society or any body like that, were to change a name unnecessarily. Once a name is given to a place for good or bad, I honestly think it requires a great deal of thought before it is changed. Names are so very much dependent on the way in which the first explorer happens to go. If he comes from the north he will give one name; if from the south another; if accompanied by Chinese interpreters he will give a Chinese name; if accompanied by other interpreters other names get used. I think that once a name has been current for a good many years I should be very sorry to make a change.

General C. G. BRUCE: All I wish to say about the name is that in all my old maps I have always seen the ranges marked Muztagh or Karakoram, and further that I have always heard "Muztagh" used by the Baltis as a sort of omnibus word meaning snowy ranges. The language of the Baltis is a mixed language, and they might easily have adopted a Turki word. I have found that when talking to men in that part of the world, when they said "Karakoram" they meant the pass leading from Ladakh into Central Asia. Generally, no doubt, the Baltis do use "Muztagh" as an omnibus word meaning the snowy ranges, just as farther east they use the word "Barafwān," which merely means the snowy range, and as the Nepalese use Himal or Himal Shreni for the range and Himal Chuli for the high points generally.

Whenever I have heard "Muztagh" used among the Baltis it has always meant the snowy range. Personally I think it is rather absurd to use the word "Karakoram" for a snowy range as, after all, it only means black earth. I am quite certain that Tibetans east of Leh know nothing of the word "Karakoram," which is pure Turki, although it is possible that they may have heard of it as applying to the pass leading to Central Asia.

Colonel PHILIP NEAME: My experience is only as a traveller in those parts, but I have been in touch with some of the top villages near the glaciers and the permanent snows on the south side of the range under discussion, and I have certainly heard the name Karakoram applied to the range and to the region by people I have met on the south side. Now I would say that the name seems to be quite well established, and the type of people who know it are certain Europeans, certain educated natives, Kashmiri officials, and local travellers such as transport men, shikaris, and village headmen. So it seems a pity to change this name and bring in one which, apparently, does derive from the north of the range. The name Muztagh is derived from the north of the range, whereas the Karakoram name does appear to be known on the south side, which I maintain is the side we should consider. We are considering this area from the point of view of the Indian Empire. Apparently the authority for the name Muztagh comes very largely from the traders on the trade routes. Those are mostly Yarkandis, and I can quite see that they, passing over a high snowy range, refer to it by the generic term, "Muztagh," just as we should say when going up any part of the Himalayas, "There are the snows."

I can give an analogy to that, for the same sort of thing occurs in several other parts of those mountains. For instance, Nanga Parbat has two names. It is known as Nanga Parbat from the south, the Kashmir side, and it is named Nanga Parbat on our maps, whereas it is known as Dumani on the north side, which I believe is the Gilgit name for it. However, one would not put that forward as a reason for renaming Nanga Parbat on all our maps and calling it Dumani.

General BRUCE: It is on most of the maps.

Colonel NEAME: Anyway, Nanga Parbat is the name from the Indian Empire point of view. Then there is one other analogy. Travelling in the Himalaya you find the local natives, where they talk Urdu, referring to the high snows as the "Bara pahar" or "Bara barf," which mean great hills or great snows. In the Garhwal Himalaya I have heard them refer to the high range in that way. You would not change the name Himalaya because local natives have not what one may call a proper name for the range. As a rule, in one's experience out there local villagers have no name at all for a range; they call the most conspicuous hill at the head of their nullah generally by the name of the village they live in. Round Haramosh I have heard four different names for it, but none of them Haramosh. Therefore I would advocate that when a name such as Karakoram has been known for many years, at any rate to the educated inhabitants of the region, we should maintain it and keep it for both the region and for the high range.

The PRESIDENT: Mr. Hinks, would you like to say a few words with regard to the map?

Mr. HINKS: Without having any knowledge of this country except that gained vicariously as editor of the *Geographical Journal* which, as you know, has published from time to time certain discussions upon this question, I may say that the point that has always struck me is the real difficulty of looking upon mountains there as ranges. Sir Sidney Burrard has defined a range as a "curvilinear alignment of peaks," but I feel from what experience I have of the matter that there is a good deal to be said for Dr. Longstaff's use of the word "complex," or something equivalent to it. I was glad to hear him use that word rather than "range," for there are many things called ranges on one side which do not appear as ranges from the other side—the Drakensberg, for instance.

A point which in the earlier discussions has not been brought out, but one that has appealed to me, is the desirability of, as far as possible, naming districts, big groups of mountains, rather than ranges. Dr. Longstaff pointed out that the practice in the Alps had now settled down into dividing up the mountains into groups separated by conspicuous valleys and celebrated passes. It seems to me from the general geographical point of view very desirable to have such a name for such a region as that between the Nubra and the Upper Shyok and south of the Saser pass. It would not debar it from being part of the Muztagh-Karakoram or any other general name adopted for the range. One wants a name for that group of peaks which is now known, roughly, as the Nubra peaks, although I do not know why the Shyok has been left out. It is most difficult to find proper names for those. I hope we shall not have to adopt the bad device of the botanists or gardeners who make compound names out of two adjacent names. They would like to call it the Shybra or the Nubrok, which is convenient, but ugly. That is all I have to say upon the subject of the large and general question.

The question of names of individual peaks will come very much later, but I would like to express the hope that as a result of this discussion we may continue it, first of all informally after this meeting and then perhaps at a later date in the summer have a round-table conference in order that we can put forward to the Surveyor-General of India certain suggestions, if there comes to be any agreement, in response to that very courteous and generous suggestion made by his

predecessor, the ex-Surveyor-General, that the Survey of India would be very glad to listen to the views of the Royal Geographical Society upon this subject.

Mr. J. H. REYNOLDS: With regard to the word "Muztagh," Robert Barkley Shaw, who I suppose is still the great authority on Turki, says in his Vocabulary that it means "a glacier; also a snowy mountain. See remarks regarding the application of such words as proper names under *Aqtagh*." There he says: "*literally*, white mountain, *i.e.* snowy range (as distinguished from mountain ridges on which the snow is not perpetual). Locally this word [and he is referring also to Muztagh] is often used as a proper name applied to the particular snow mountains of the neighbourhood; but its use in general geography should be supplemented, as in native use, by prefixing the name of the locality, as in English we say: the Brighton Downs, the Wiltshire Downs, etc. The neglect of this causes much confusion and false geography." So apparently the term "Muztagh-Karakoram" ought to mean that part of the Karakoram which has ice and snow. I have never been within thousands of miles of this district, but I presume that other parts of the Karakoram have ice and snow, which are not confined to the part to be called the Muztagh-Karakoram.

Mr. TOMBAZI: I have not visited that part of the Himalaya—my only travels have been round Kangchenjunga; but for the reasons put forward by Major Mason I am rather inclined to agree with the suggestion he made of renaming the mountains of the Karakoram district.

Major MASON: Dr. Longstaff has replied to a great many questions, and I think we might discuss the subject again at a round-table conference, however much we may dislike the sound of that word at present. We might preferably have a square-table conference and talk the question over and try to come to some agreement. I suggested the name Karakoram-Himalaya, joining the two words together, mainly because it has been coming into use for a good number of years. For the past twenty years the maps of this district have been headed Karakoram-Himalaya.

Sir SIDNEY BURRARD: Whose maps?

Major MASON: Several isolated maps published by the Royal Geographical Society or the Italian Geographical Society. For instance, Sir Martin Conway's map of the Baltoro was labelled so. However, I am not prepared to press this compound name, and Sir Sidney Burrard has given good reasons against its use.

Colonel Neame's statement that the word "Muztagh" is only known on the north is not correct. I asked the Mir of Hunza where the Muztagh mountains are, and he said, "To the East." His language is Burishuski and not Turki. He knows that the snowy mountains on his east are Muztagh. Longstaff has also shown us that in Vigne's day he got the name Muztagh from Baltis on the south. Godwin-Austen heard it on the south. I have heard traders both Turki and Tibetan (that is to say men from Leh) using the term "Muztagh" for the ice-mountains north of them on the Saser pass. Muztagh is a descriptive name for the ice-mountains (used originally by the Turkis), which every one in their neighbourhood has now come to know; the name Karakoram is not used for these ice-mountains by them.

In my paper I purposely mentioned our predecessors as little as possible, because I did not want to start a discussion on their respective merits or let it be thought that I was belittling their work in any way. I never have belittled the work of our predecessors and never will. But as Sir Sidney Burrard asked me to let him have some proof that Karakoram is used for the pass and not for the mountains, on the spur of the moment I have sent to the library for one book—that by Colonel Wood of his explorations with the De Filippi expedition. Wood

says, writing on the name Karakoram\*: "The name is applied by the traders to the pass alone and not to the mountains. Dr. Thompson, who, in 1848, was the first European to reach the pass, found the same in his day (*J.R.G.S.*, vol. xix), and Hayward, in 1869, repeats the same information (*J.R.G.S.*, vol. xl). The latter appears to have been the first to suggest applying the name of the pass to the range, so it may be as well to remember that this extension of the name is purely due to Europeans."

I have no other evidence I can quote at the moment.

Sir SIDNEY BURRARD: I asked you to produce evidence as to which British explorer had taken the name from the pass to the mountains. That evidence is only that Colonel Wood says some explorer has done it.

Major MASON: He says "The name is applied by the traders to the pass alone and not to the mountains. Dr. Thompson . . . found the same thing." So did Hayward. Colonel Wood supports his statement with references.

Sir SIDNEY BURRARD: But British explorers before Hayward or Wood had found the name Karakoram applied to the mountains. I was quoting men of 1820 and 1840 who found the name Karakoram applied to the mountains by the natives.

Major MASON: I am sorry, Sir, I cannot say more than this. I do not know who applied the name to the mountains. I suppose it was applied to the mountains by the people at Dehra Dun.

Sir SIDNEY BURRARD: You only have to look at Moorcroft's Diary of 1820, before the office at Dehra Dun was built.

Major MASON: Moorcroft applied it generally to the undetermined mountainous watershed between the Tarim and the Indus basins, on which is situated the Karakoram pass—simply to the mountains at the watershed. The name of the pass was the only name he knew on the whole of those mountains. Neither Moorcroft nor Cunningham saw the Muztagh.

Sir SIDNEY BURRARD: Moorcroft got the name from the Tibetans and applied it to the mountains.

Major MASON: Is there any proof of that?

Sir SIDNEY BURRARD: There is his Diary and Cunningham's book of 1847.

Major MASON: I do not think Cunningham ever actually went anywhere near those mountains.

Sir SIDNEY BURRARD: He explored the whole Indus valley, and surely the people of that valley, who are always seeing a mountain in front of them, have some voice in the matter.

Major MASON: I do not think the people of the Indus valley can see the mountains we are discussing.

General BRUCE: Have not they got it from those Aghil travellers who ply continually between Leh and the Karakoram? They go backwards and forwards over the Karakoram and Saser passes. Therefore they gave the name to the pass.

Major MASON: Those travellers use the name for the pass only and not for the mountains.

Sir SIDNEY BURRARD: What I say is that no British explorer took it from the pass and gave it to the mountains.

General BRUCE: It is said he got it from the traders who were his transport.

Sir SIDNEY BURRARD: He got it from the Tibetans.

General BRUCE: They were half-castes. It would not be a Tibetan name because it is pure Turki.

Sir SIDNEY BURRARD: Moorcroft is before Vigne and Cunningham is in 1847,

\*Explorations in the Eastern Kara-koram and the Upper Yarkand Valley,' Col. H. Wood, p. 7.

and Dr. Longstaff quoted Godwin-Austen. On Godwin-Austen's grave there are the words: "He explored the Karakoram range."

Dr. LONGSTAFF: Vigne was the first traveller who went in. Moorcroft never set foot on the ice. Vigne practically went up.

Sir SIDNEY BURRARD: Surely inhabitants 50 miles from the mountains have as much right to have a voice in the name as those who live on the ice.

Dr. LONGSTAFF: No one has ever lived in those mountains.

Sir SIDNEY BURRARD: The people living in the Indus valley have always given the name Karakoram.

General BRUCE: Not in the lower part of the Indus valley. The Baltis still use the name Muztagh because they think it is the name you will understand.

Sir SIDNEY BURRARD: What happens in many places is that there are two different sets of people and they are each using a different name.

Dr. LONGSTAFF: No Tibetan ever goes over the Karakoram pass.

Sir SIDNEY BURRARD: It is not people who cross but who live in sight of the mountains.

Dr. LONGSTAFF: No Tibetans live in sight of those mountains.

Sir SIDNEY BURRARD: The people who named the Himalaya are those who live in the plains of India.

The PRESIDENT: I think I must now close the meeting. It seems that we have had a useful preliminary discussion, and we shall hope that it will lead eventually to the conference that has been suggested. It is quite certain that the whole of this area must be studied by the aid of Major Mason's map. I do not believe that any here can fully understand the arguments that Major Mason has brought forward without a study of that map, and I personally should be very glad if the Society were able to publish it, but map-publishing is expensive. If we could publish something like it, it would help all interested in the subject, because there is no map now in existence which contains the information that that map does. I am sure we are all grateful to Major Mason for introducing the subject; and for the production of the map. In your name and the name of the Society I thank him

*Note on Sir Sidney Burrard's paper, "The Geographical Representation of the Mountains of Tibet," published in the Proceedings of the Royal Society, Ser. A, vol. 127, 2 June 1930.*

This paper was received by the Royal Society on March 18, and was read, after publication, on June 12. It seems convenient to note here its principal points, for consideration with its author's contribution to the above discussion.

In the discussion Sir Sidney Burrard maintains that "the Karakoram mountains stand in Tibet. The Tibetan population live on the south side of the range." He is thus not speaking of the mountains to which Major Mason's proposals refer, but to mountains much farther east which he believes are continuous with what is generally meant by the Karakoram.

Similarly the title of the paper published by the Royal Society limits it to the mountains of Tibet, of which country "the Karakoram forms the central backbone which is the second highest range of mountains upon the earth . . . The main features of the Karakoram were determined in 1855-1865 by Colonel Montgomerie's surveys. . . . In 1870 . . . its eastern prolongation was unknown. In 1874 the survey sent the pundit Nain Singh to explore Central Tibet. . . . The view adopted by the Survey, 1878 to 1880, was that Nain Singh's range was probably the easterly continuation of the Karakoram. . . . In his book published in 1909 Sven Hedin also showed that the prolongation of the Karakoram range through Central Tibet was 2° further north than had been thought. . . . Since 1914 the surveys of De Filippi and Wood have given additional confirmation to the correct-

ness of the accepted alignment." The paper then criticizes Major Mason's proposed revision of the Karakoram ranges, but without indication that neither Montgomerie nor De Filippi and Wood in 1914 nor Mason was concerned at all with Tibet. The argument thus briefly traced above is therefore a little difficult to follow. The ill-defined watershed in the neighbourhood of the Karakoram Pass is at one time "a ridge carved out of the northern slopes of the Karakoram range," but a little later the "great divide" and "the high Karakoram crest-line."

It is more difficult to follow Sir Sidney Burrard in his statements: (1) that Colonel Wood's map "showed that there was no Aghil range." His map did not extend so far; (2) that the feeders of the Yarkand and Karakash rivers flow straight away from the main divide without encountering any serious obstacle: there is at least the gorge of the Karakash; (3) that the publications of De Filippi's and Wood's surveys have taught us that no trough exists behind the Karakoram. He has himself referred in the preceding paragraph to the deep trough of the Shaksgam which lies behind the highest peaks of what most people, but not he, would call "the real Karakoram Range"; (4) that the old alignment had been adopted in consultation with geologists—a suggestion made in the *Journal* for September, 1929, (vol. 74, p. 276) but repudiated by Sir Sidney (*G. J.*, 75, 1930, pp. 35-37).

The paper is written to advise "geologists and meteorologists and all who are interested in small-scale maps to consider the questions at issue before they accept the new geographical representations," but it gives no hint that at the invitation of the ex-Surveyor-General of India the whole subject is in active discussion by this Society.—ED. *G. J.*

*At the request of the Editor, Dr. Emil Trinkler has kindly sent the following interesting contribution to the discussion :*

The name "Aghil-Karakoram" suggested by Major Mason for the ranges stretching north of the main Karakoram Range is certainly worth considering. All the ranges in which also the Aghil Pass and the Karakoram Pass are situated belong together as well from an orographical as from a geological point of view. Therefore I do agree with Major Mason's proposal in calling all these ranges between the Western Kunkun and the main Karakoram Range the Aghil-Karakoram, or Northern Karakoram Range, if we call the Kailas Range the Southern Karakoram.

Perhaps the name of "Karakoram" alone would do for the high range of snow peaks. But if these mountains are to have a special name, "Muztagh-Karakoram" would really be the best name to give, if not simply the Karakoram Range.

The name "Kailas-Karakoram" should be altered. The high snowy mountains called Kailas-Karakoram have nothing to do geologically with the Kailas Mountain, which is so far away, and which, from a geological point of view, is only a pyramid carved out of a sedimentary filling of Pliocene Age, the strata being only slightly disturbed. Furthermore it is still unsettled whether topographically the "Kailas-Karakoram" finds its continuation to the east in the mountains round about the Kailas. Very probably we have to look for its eastern continuation in the ranges north of the Kailas. Therefore I would suggest altering the name of Kailas-Karakoram to "Southern Karakoram Range."

Thus we might have the

Aghil-Karakoram	==	Northern Karakoram Range.
Muztagh-Karakoram	==	Main Karakoram Range.
Kailas-Karakoram	==	Southern Karakoram Range.