KARAKORAM NOMENCLATURE

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IN publishing the conclusions reached by the Karakoram Conference during the winter of 1936, it seems appropriate to place on record both the origin of that conference and the various stages of its work. It was during a study of the literature of the Karakoram more than twenty years ago that I noted the growing inconsistencies regarding range-names among travellers and writers on the region. At the end of my paper on the Shaksgam valley and Aghil range read before the Society on 24 January 1927, I called attention to these inconsistencies (*Geogr. J.* 69 (1927) 311), and in notes by Dr. T. G. Longstaff and myself, written after the discussion on that occasion and published with my paper, certain tentative proposals regarding the range names were put forward for examination. These proposals were at the same time submitted to the Surveyor-General of India (Sir Edward Tandy), who expressed the opinion that the whole question of Karakoram nomenclature should be discussed by geographers and travellers with special knowledge of the country. In a semi-official letter to me, a copy of which he addressed to the Society, he asked me to consult with the Royal Geographical Society, and intimated that he would be prepared to accept the decisions reached after such consultation.

In his preface to my official report on the Shaksgam Expedition of 1926, Sir Edward Tandy gave his personal views as follows:

> I do not consider this department should decide questions which depend so much on international usage. We can only assist by publishing the suggestions of our best experts, and then hope that the Royal Geographical Society, which includes all the principal geographers and explorers interested, will find an early opportunity of discussing these suggestions and of arriving at decisions, in which case we shall be happy to accept them and to incorporate them on our future maps (*Records of the Survey of India*, vol. xxii, p. iv).

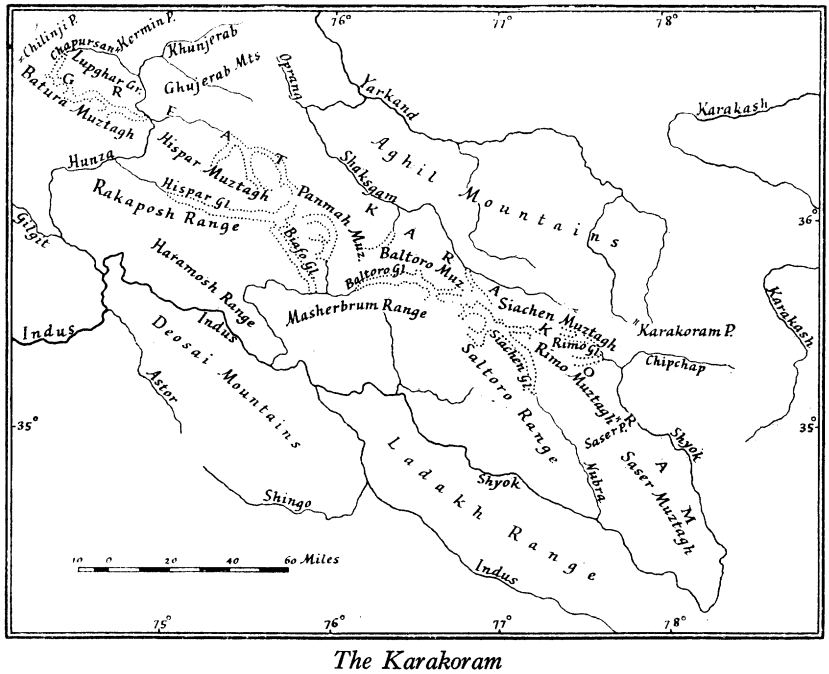
This was the origin of the special interest which the Society has taken in the matter during the last ten years.

While on leave in England in 1927, and in India subsequently, I devoted much time to collecting the references from published material, discussed them personally and by letter with various travellers and experts, and compiled a map of the whole region from Survey of India and other sources. In the *Journal* for September 1929 (p. 276), and January 1930 (pp. 35, 38, 44) appeared papers and letters on the subject; and at an afternoon meeting of the Society on 12 May 1930, I initiated a discussion with a paper that had previously been submitted to the Surveyor-General of India (Brigadier R. H. Thomas) and had received his general approval (*Geogr. J.* 76 (1930) 143–58). The resulting discussion however showed two apparently irreconcilable opinions, and it was felt that until a detailed modern map showing the relief of the whole area was available, it was impossible to reach a conclusion generally acceptable to all.

The work of preparing this map proceeded slowly, partly owing to the

difficulty of showing such great altitude differences by layer tints, partly because it was necessary to wait for the results of recent expeditions, and partly owing to pressure of work in the Society's drawing office. By the end of 1935 the map was sufficiently far advanced to approach the Surveyor-General (Brigadier H. J. Couchman) to ascertain his views and wishes. In March 1936 the Director of the Geodetic Branch of the Survey of India intimated, on behalf of the Surveyor-General, that a settlement was most desirable, that he would like to be represented at any further conference that might take place, that he would cordially accept an invitation to such a conference, and that the winter of 1936–37 would be most suitable from his point of view.

The Council of the Society had some years before appointed a small Com-



The Karakoram

mittee, with Sir Charles Close as chairman, to deal with the preparation of the map; and from this Committee they chose three members to be their representatives at the conference. Invitations to the conference were sent both to the Surveyor-General and to the Director of the Geological Survey of India, and a collection of cuttings giving the views of various authorities was sent by the Society to them and others interested. During the summer of 1936 a provisional edition of the Society's map was brought out and also sent to these people.

Meanwhile in India the whole policy of naming features in uninhabited and little-visited parts of the Himalaya was under consideration, the result of which was the issue of a letter from the Surveyor-General to various bodies interested, among which were the Royal Geographical Society and the

Himalayan Club. This letter, dated September 1, laid down the principles which would underlie the policy of the Survey of India regarding the naming of peaks and other features in the Himalaya and neighbouring mountain ranges. Sir Harold Couchman's letter is as follows:

As you are perhaps aware the question of the entry of names invented by explorers and others for peaks and other features of the mountain systems to the north of India on maps published by the Survey of India is one on which there has been occasional controversy.

The practice of the Survey of India in the past has been that no names should be entered on its maps, of areas for which it considers itself responsible, unless they have been found to be of local or at least indigenous origin. It has admittedly departed from this practice in the case of Mount Everest, but it will be generally agreed that the highest mountain in the world is entitled to special treatment, especially when the result was so euphonious. In the absence of a local or indigenous name, the old practice was to allot a symbol, usually a letter and a number. This practice has however been abandoned on our maps for many years except in the case of K^2 which, as probably the second highest mountain, is perhaps also entitled to special treatment.

This practice has had two results, one favourable, the other unfavourable. The favourable result is that there has been no temptation to give personal names to peaks, the embarrassment of selection of the person to be so honoured has been avoided, and the situation, not unknown, of the name of a peak being changed because the reputation of its owner had lessened has not occurred.

The Survey of India will always be grateful to its predecessors for this result.

The unfavourable result is that owing to absence of local or indigenous names in these sparsely inhabited areas our maps are undoubtedly deficient in names. With the increasing growth of Himalayan travel this defect is becoming of increasing prominence.

The position has therefore been examined and it has been decided that the embargo on invented, other than personal, names should be removed.

Invented names will be accepted by the Survey of India for its maps taking into consideration the following points:

(i) Lack of local names in the vicinity.
(ii) Suitability of the names.
(iii) When applicable, the degree of currency among climbers and explorers that they have already obtained.
(iv) Personal names will not be accepted.

Suitability is difficult to define, but entirely fanciful or humorous names will not be acceptable. Well-known English names of peaks, such as those in the Karakoram and the Sikkim Himalaya, will be considered for adoption at once.

You will no doubt agree that this change in policy should be brought to the notice of travellers and I would request your assistance in doing so either by the publication of this letter or by a reference to its contents.

The Survey of India will be grateful to past, present, and future explorers for any suggestions they may care to make. As regards the language of the names we would prefer that English names be confined to the more popular climbing centres. In the lesser-known regions explorers are requested to suggest names freely after consultation with their local guides or coolies. Nalas, cols, glaciers and peaks may be named after some local pasturage or other existing name, or may be invented with reference, say, to shape, colour, or some other

distinctive feature. Such names should normally be given in the local vernacular and should be pointed out to the local people so that they may the more rapidly gain currency. English names should be given sparingly in areas which are likely to be unimportant from a mountaineering point of view.

Explorers are requested to report their proposed names with sketches or annotated copies of Survey of India maps to me either direct or through you. In sending in reports full details should be given of the reasons for the proposed names, with meanings in English, and the local language adopted.

On receipt of this letter it seemed to us that during the winter conference we might usefully discuss, not only the broader questions of regional and range names, but also the detailed grouping of massifs in the Karakoram, their names, and those of their chief individual summits. I had collected a large number of notes and references relating to this subject during the last fifteen years, and had already arranged many of the known peaks and massifs into groups. It had already appeared to me certain that if we were to obtain a settlement of the main problem which would be acceptable to all and which would avoid the barren controversies of the past, we must abandon the old proposals which I had put forward and pressed in 1927 and 1930, in spite of the fact that they had gained a considerable amount of support and acceptance. We had to find some other classification of the mountains which embodied the points of agreement and met the criticisms of those who objected most strongly to the earlier proposals. During the last three months of the year I therefore drew up a detailed draft memorandum for discussion by the conference, and placed the major groups tentatively on our provisional map.

Colonel C. G. Lewis, then Director of the Geodetic Branch of the Survey of India, who had held charge of the recent modern surveys in the Chitral and Gilgit Agencies, and who had considerable experience of the difficulties of the problem, was appointed by the Surveyor-General to represent the Survey of India. He arrived in November 1936, bringing with him the maps and blue prints of the still later surveys.

The draft memorandum was then exhaustively examined point by point at no less than nine informal meetings of the conference. As soon as the first general principles were agreed upon, the general approval of the Surveyor-General was asked and obtained. As work progressed, Colonel Lewis explained the proposals to Sir Sidney Burrard, who had taken so active an interest in the matter since it became acute ten years ago. Typed copies were sent to India for examination and criticism. By the time the conference met officially on March 23, the revised memorandum, which had been circulated for a last scrutiny, was practically in its final form. With a few minor amendments it was then set up in type and copies were circulated to those geographers and travellers known to be particularly interested.

It was most gratifying to learn that the proposals met with general approval, Sir Sidney Burrard's support being particularly generous. In a letter dated 23 April 1937, he wrote as follows:

Lewis has shown me the outlines of your solution of the Karakoram problem. This problem has confronted the Survey for fifty years. Colonel Strahan used to mention it as unsolved. I must send you my congratulations on your success in finding a solution that is both scientific and artistic. Your Committee's

solution will meet with the approval of British India and of Central Asian explorers. I regard your success as remarkable.

When a long outstanding problem is solved, it is generally easy to say that the solution is obvious. But the fact remains that the problem of Karakoram nomenclature has been a real difficulty facing the Survey of India for half a century. The solution has only been attained by much thought and work; and I can only do justice to my own feelings by sending you my warm congratulations.

I should like to place on record my own personal appreciation of this generous tribute to the Committee's work.

The conclusions of the conference were reported to the Council on 5 April 1937, and the detailed recommendations were submitted to the Surveyor-General of India for sanction. In a letter dated 30 August 1937, he gave his approval to the proposals without qualification of any kind. I should like to take this opportunity of thanking Sir Harold Couchman and Brigadier Lewis, who has since succeeded him in the Surveyor-Generalship, for their courtesy and close co-operation throughout.

A few remarks regarding the decisions may perhaps not be out of place. The general principles underlying the scheme have been to define and name the topographical features as they exist to-day and to avoid theorizing on their structure and origin. Much of the confusion that has arisen in recent years has been due to the introduction of conflicting theories of structure based on insufficient data. Once we had a comprehensive map showing not only the relief and topography clearly from the most recent surveys, but also such details as the ice and permanent snow, it became a problem of dividing the whole region into suitable geographical blocks, of sub-dividing these blocks into suitable groups and massifs, and then of searching for and agreeing upon the most suitable names. This meant a detailed study of the writings and maps of a large number of explorers and cartographers, and the settlement of a number of conflicting statements. The names of the larger divisions were first agreed upon. The name "Karakoram," which had originally been extended from the pass of that name to the mountains by European geographers, was further extended to include the whole region to which subsequent travellers have applied it, while the term "The Great Karakoram" was accepted for the great alinement of ice massifs that extends from one end of the region to the other. It was felt that the locally preferred name "Muztagh," which also had considerable historical significance, could be suitably applied to the major divisions of the Great Karakoram. The muztaghs lent themselves to subdivision into groups, and the groups into massifs and individual peaks. It was felt that the term *muztagh* was inappropriate either linguistically or descriptively for the subdivisions of the lesser Karakoram, and, for want of a better term, they were called "ranges." The muztaghs have been named in every instance but one from the great glaciers which drain them; the ranges of the Lesser Karakoram from the most conspicuous mountain on their alignment.

The groups have been named from the best known locally named feature, often a glacier, whenever possible from the most accessible side; there are a

few exceptions, where it has been deemed advisable to retain some name that has long been associated with the group in existing literature, as, for instance, the Kanjut Group. A few of the more important unnamed peaks have been named, either from their group-names, or from an accessible locality, with a suitable affix such as *Sar*, or *Kangri*, according to the language of the region, and according to local practice. A few of the recognized English names for the best known and most prominent peaks have been retained, but only a very few. The names so retained from long usage are K^2, the Muztagh Tower, and Broad Peak. The "Hidden Peak" of Conway has long been known in the records of the Survey of India as Gasherbrum I, and this official name is retained. The conspicuous unclimbed summit north-east of K^2, inappropriately called "Staircase" on unofficial maps of the past, has been named "Skyang Kangri," from the glacier on its north. A number of other unofficial English names for peaks have been rejected; some of these peaks have been renamed, while the renaming of others has been left to subsequent travellers. All personal names have been discarded. Notes are given in the appendices explaining the different questions involved. Regions which are or were inadequately mapped at the time of the conference have been left in outline for subsequent treatment.

It is not to be expected that all the decisions reached will meet with the approval of every student of Karakoram literature and geography. It is true that controversy is keenest where facts are fewest. In these distant and sparsely inhabited lands some conventionalism is essential to the needs of ordered geography, and it is to be hoped that travellers and geographers will in future accept the nomenclature that has been agreed upon and authorized. In some instances it may be necessary to allude in papers to old and unofficial nomenclature for the purposes of identification, but it is hoped that travellers will co-operate to bring into use the authorized names as early as possible, so that the literature of the Karakoram may be freed from the ambiguities and inconsistencies of the past.

KARAKORAM CONFERENCE REPORT

The recommendations of the Karakoram Conference as accepted by the Council of the Royal Geographical Society and approved by the Surveyor-General of India are printed below.

I. The term *Karakoram.* We recommend that the term "The Karakoram" be used to denote the mountain region whose boundaries are defined thus:

On the south: by the Shyok river from its bend at about long. 78° 15′ (map sheets 52 J, F, B, A, 43 M) to its junction with the Indus, about long. 75° 55′; then by the Indus to its junction with the Gilgit river about long. 74° 40′ (43 I); and by the Gilgit river (43 I, 42 L, H) to the confluence of the Ishkoman river about long. 73° 45′.

On the west: by the Ishkoman and Karumbar rivers (42 H, L) to the Chilinji pass.

On the north: from the Chilinji pass, down the Chapursan river, over the Kermin pass to Rich, and down the Kilik river to its junction with the Khunjerab (42 L); then up the Khunjerab river to the Khunjerab pass, across the head of the Oprang Pamir to the Oprang pass, and down the Oprang river to its junction with the Shaksgam (42 P); then up the Shaksgam river to its source at Wood's Pass "G" (for which we propose the name *Shaksgam pass*) (42 P, 51 D, 52, A, E); then to the snout of the Rimo–Yarkand river source, and by the left bank of the Rimo glacier to the junction of the Rimo river and the Chip-chap (52 E).

On the east: by the upper Shyok from the Rimo–Chip-chap junction to the great bend in the river about long. 78° 15′ (52 E, F, J).

Note: The use of the term "the Karakoram" for a region is in accordance with the general usage among geographers for many years past, but up till now the boundaries have not been defined. The proposed boundaries exclude the Aghil mountains, all mountains east of the upper Shyok and on the Tibetan plateau, the mountains between the Shyok and the Indus rivers ("the Ladakh range"), but they include the mountains of Hunza west of the Hunza river, as far as the Karumbar–Ishkoman river.

Though not directly in the terms of reference of the conference, we suggest that "the Aghil mountains" be defined by the Shaksgam on the south and west as far as the Oprang confluence, on the north by the Shaksgam and Raskam (Yarkand) rivers, and on the east by the Yarkand river tributary draining from the Karakoram pass.

We also suggest that the "Ladakh range" be restricted to the definite range in Ladakh, between the Indus and Shyok rivers; that the term "Zaskar mountains" be restricted to the mountains of Zaskar, or at least not extended east of the upper Sutlej; and that the term "Deosai mountains" be applied to the mountain region defined on the north by the Indus from long. 76° 15′ to long. 74° 45′, and on the south by the Astor, the Das Kirin, and the Shingo rivers, to the junction of the latter with the Suru river, and then by the Suru river to its confluence with the Indus.

II. *The Great Karakoram.* We recommend that the term "The Great Karakoram" be given to the main crest zone of the Karakoram, from the

mountain Koz Sar (36° 43′ 10″, 74° 05′ 19″, Map 42 L) in the west along the crest zone south of the Batura glacier, north of the Hispar, Panmah, Baltoro, and Siachen glaciers, and along the watershed between the Nubra and upper Shyok rivers.

III. *Divisions of the Great Karakoram.* We consider it desirable to divide the Great Karakoram into sections, and to apply the descriptive term *Muztagh* [1] to each section. The sections proposed are as follows:

(A) *The Batura Muztagh:* From Koz Sar, south of the Batura glacier, to the gorge of the Hunza river (42 L).

(B) *The Hispar Muztagh:* From the gorge of the Hunza river, north of the Hispar glacier, to the head basin of the Biafo glacier (42 P).

(C) *The Panmah Muztagh:* The groups drained by the Panmah glacier and its main tributaries from the head of the Biafo glacier to the West Muztagh pass (42 P, 51 D, 52 A).

(D) *The Baltoro Muztagh:* From the West Muztagh pass, north and east throughout the length of the Baltoro glacier, to its head south-east of the Gasherbrum group (52 A).

(E) *The Siachen Muztagh:* From the above head of the Baltoro glacier along the northern mountains of the Siachen glacier and south of the Shaksgam valley, as far as the pass between the Teram Shehr and Rimo glaciers, thence north of the Central Rimo glacier to its snout (52 A, E).

(F) *The Rimo Muztagh:* From the pass between the Teram Shehr and Rimo glaciers along the mountain groups between the Siachen and the upper Shyok, as far as the Saser pass (52 E).

(G) *The Saser Muztagh:* From the Saser pass to the south-eastern extremity of the Great Karakoram in the bend between the upper Shyok and the Shyok rivers (52 E, F, J).

IV. *Mountain groups of the Great Karakoram.* On small-scale maps it is neither feasible nor desirable to enter any but the most important peak names; but it is possible now to classify the peaks in groups, and we considered that it would be convenient if group names were to be inserted on small-scale maps; peak names, excepting those of the most important, being reserved for maps on the scale of 1 : 250,000 and larger. An attempt to group the peaks of the Great Karakoram *muztaghs* has been made in Appendix I of this report.

V. *Mountain divisions of the lesser Karakoram.*—So far we have only dealt with divisions and subdivisions of the Great Karakoram. The mountains of the lesser Karakoram are not so easy to deal with, for they do not lie on a single long alinement of groups. The most important of them however fall on a series of shorter alinements, which might be called "ranges," though the term is not very satisfactory. They correspond to the "Muztaghs" of the Great Karakoram, but we consider this Turki word to be unsuitable for them.

[1] *Muz* = ice; *Tagh* = mountain. Muztagh, not Mustagh, is correct.

(A) North of the Great Karakoram, in Hunza territory, there are two systems of mountains, one on each side of the Hunza river, which may be called the *Lupghar group* and the *Ghujerab mountains* respectively.

The remainder of any importance all lie to the south of the Great Karakoram, and may be conveniently listed on the following alinements [1]:

(B) *The Rakaposhi range*, from the Hunza river west of the peak Rakaposhi, following the snowy crest zone between the Hispar and Chogo Lungma glaciers as far east as long. 75° 30′. Two subsidiary groups at the eastern end may be considered independent of Rakaposhi. These are the *Ganchen group* and the *Meru group*.

(C) *The Haramosh range*, from where it joins the Rakaposhi range about long. 74° 50′, along the crest zone between the Chogo Lungma glacier, Basha and Shigar rivers on the north and the Indus on the south.

(D) *The Masherbrum range*, from the junction of the Braldu and Basha rivers, west of Mango Gusor, along the crest zone south of the Braldu river and Baltoro glacier, as far east as the Kondus glacier and valley. Two independent groups, at present unnamed, extend south from the Masherbrum range.

(E) *The Saltoro range*, lies between the Kondus on the west, the Siachen and the Nubra on the east, and the Shyok valley on the south. It is crossed by the Saltoro or Bilafond pass.

An attempt has been made to group the various massifs of these "ranges" in Appendix II.

APPENDIX I: MOUNTAIN GROUPS OF THE GREAT KARAKORAM

In the following lists an attempt has been made to collect the mountains of the Great Karakoram into groups, and to name these groups from some geographical feature, generally the most important glacier draining from them. Some groups are, of course, better known than others, and it has been easier in these instances to define the group boundaries with greater precision.

Occasionally comments have been made on peak names, while a few additional names have been suggested.

Where possible, the latitudes, longitudes, and heights have been given from the Survey of India triangulation pamphlets, unless stated otherwise for definite reasons, and where other values of peak co-ordinates have been obtained by other observers comment has been made.

Figures in italics are only approximate, and are measured from topographical maps; they are only given for the purposes of identification. Where co-ordinates are given only to the nearest minute, thus *36° 35′, 74° 19′*, the map from which they are taken is not directly adjustable to existing Survey of India maps. Heights shown in brackets, thus (*21,250*), are derived approximately from an examination of the contours.

Where names for individual peaks have been suggested, the principle has been to name them from the most accessible valley or glacier draining them. Suggested new names for peaks are shown in italics; old names that we recommend should be dropped are in brackets.

[1] The new survey of 1931 in Sheet 42 L is not available in England; consequently we have not attempted to group the mountains between the Gilgit and Hunza rivers south of the Batura Muztagh.

Mountain Groups of the Great Karakoram.

(A) *Batura Muztagh:* Map 42 L.

(a) *Koz group*, at the head of the Koz Yaz (glacier).

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Koz Sar	21,907	36° 43′ 10″	74° 05′ 19″	Pk. 2/42 L
—	*21,250*	36 43 24	74 06 55	Pk. 1/42 L
—	*20,345*	36 43	74 11	42 L

(b) *Yashkuk group*, at the head of the Yashkuk glacier.

—	*21,548*	36° 40′	74° 13′	42 L
—	*21,915*	36 39	74 14	42 L
—	*20,060*	36 38	74 16	42 L

(c) *Kampire Dior* group, at the watershed between the Batura and Yashkuk glaciers. Kampire Dior, "the house of the old woman," is derived from a well-known legend of the Chapursan valley, the best version of which is given by Lorimer in *Geogr. J.* 71 (1928) 535.

Kampire Dior ..	23,434	36° 37′ 32″	74° 19′ 10″	Pk. 24/42 L
—	22,740	36 38 24	74 21 33	Pk. 23/42 L

(d) *Kuk group*, at the head of the Kuk-i-jerab valley. *Kuk Sar* signifies "the summit of Kuk."

Kuk Sar	22,751	36° 40′ 08″	74° 25′ 18″	Pk. 21/42 L
—	*22,050*	36 39 06	74 25 23	Pk. 22/42 L

(e) *Batura group*, the enclosing south wall of the head of the Batura glacier.

—	*22,547*	*36° 35′*	*74° 19′*	42 L
—	22,590	36 34 08	74 22 51	Pk. 25/42 L
—	22,409	36 33 20	74 25 50	Pk. 48/42 L
—	25,294	36 31 54	74 30 01	Pk. 31/42 L
—	25,540	36 30 39	74 31 26	Pk. 32/42 L

Peaks 32 and 31 are known in the Survey of India records as Hunza-Kunji I and Hunza-Kunji II. 'Kunji' really means nothing and is probably a triangulator's error for 'Kanjut,' another name for Hunza. There is no sense in the compound name, but it is difficult to suggest a better name until the southern slopes of the massif are surveyed. (For Burrard's views, see his 'Sketch, etc.,' 2nd Edn., vol. 1, pp. 51, 52.)

(f) *Pasu group*, at the head of the Pasu glacier.

—	23,897	36° 28′ 51″	74° 36′ 53″	Pk. 55/42 L
—	24,970	36 26 30	74 40 52	Pk. 33/42 L

The triangulator's designation for Peak 33, Hunza Kunji III, should be dropped.

(g) *Atabad group*, the eastern group of the great ridge, extending to Atabad hill-station of the Indo-Russian triangulation, above the village of Atabad.

Boiohaghur Duanasir	24,044	36° 24′ 10″	74° 41′ 43″	Pk. 34/42 L
—	—	36 23 32	74 42 57	Pk. 35/42 L

Boiohaghur Duanasir, "where only the horse of the devil can go," is the name given to Conway and Bruce for this peak by the people of Baltit in 1892. Its name in Survey records is Hunza-Kunji IV. According to Burrard ('Sketch, Geol. Geog. Him. and Tib.,' 2nd edn., p. 49), Colonel Lorimer sees in this word three Burushaski words: *Boyo*, a divine animal; *Haghur*, a horse; and

Donas, one who opens. Possibly a more correct form than that given to Bruce would be *Boyohaghur Donas Sar*, but since the Burushaski language presents difficulty and is little known, it seems advisable to retain the form Boiohaghur Duanasir.

From the survey made of the Batura and this region on the Vissers' Expedition of 1925, it would appear that the height of Peak 35 is about 24,500 feet. Its old name is Hunja-Kunji V. It would, we think, be a mistake to retain these "Hunza-Kunji" names at intervals along this Batura Muztagh.

(B) *Hispar Muztagh:* Map 42 P.

(a) *Momhil group*, at the head of the Momhil glacier.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	*23,500*	36° 20′ 56″	75° 00′ 51″	Pk. 3/42 P
Momhil Sar	24,090	36 19 03	75 02 10	Pk. 7/42 P
—	22,500	36 22 43	75 02 47	Pk. 2/42 P
—	*24,860*	36 17 19	75 04 48	Pk. 8/42 P

Momhil, "the grazing-ground of the old woman," *i.e.* no one but an old fool would think of grazing there. Momhil Sar, the "summit of Momhil," the chief peak at the head of the Momhil glacier. (For Momhil, see Schomberg, 'Unknown Karakoram,' p. 233.) The old triangulators' name 'Kunjut No. 3' is meaningless.

(b) *Disteghil group*, at the head of the Malangutti Yaz glacier, in which lies Diste Ghil, "the sheepfold in the hill." Schomberg's spelling is to be preferred to Visser's, *Dasto Ghil*, which is at present on the map. We think that the peak should have the addition *Sar*, but it is a small point. Visser's spelling of the Malangutti Yaz is to be preferred to Cockerill's and Bridge's corruption *Malungidiaz*.

Disteghil Sar (Dasto Ghil)	25,868	36° 19′ 35″	75° 11′ 20″	Pk. 20/42 P
—	*25,250*	36 19 09	75 13 10	Pk. 5/42 P
—	*23,050*	*36 22*	*75 09*	42 P and Visser
—	*24,030*	*36 18*	*75 14*	42 P
—	*24,800*	*36 17*	*75 13*	42 P

(c) *Yazghil group*, at the head of the Yazghil glacier. Yazghil means either "the sheepfold in the snow," or perhaps, according to Schomberg, "the curving ice." *Yaz* is either *ice* or *snow*, and is the common word for a glacier, while *ghil* is descriptive of anything circular or round, and is generally applied to a circular sheepfold. Only one important peak has been fixed in this group as yet, and this is probably more conspicuous from the Hispar side, at the head of the Pumarikish glacier. We therefore suggest the name *Pumarikish* for it, instead of its old triangulators' name 'Kunjut No. 2.'

Pumarikish	24,580	36° 12′ 45″	75° 15′ 12″	Pk. 11/42 P

(d) *Kanjut group*, at the head of the large Jutmaru glacier tributary of the Hispar. A name for one of the summits is forthcoming from its chief glacier. The old name for *Kanjut Sar* was 'Kunjut No. 1.'

Yukshin Sar	*20,570*	*36° 14′00″*	*75° 23′00″*	42 P
Kanjut Sar	25,460	36 12 21	75 25 03	Pk. 12/42 P

(e) *Khurdopin group*, a cluster of summits at the head of the Khurdopin glacier, none of which is as yet well fixed. There was a discrepancy here between Khan Sahib Afraz Gul's plane-table and the work of both Conway

and the Workmans. Individual names should certainly not be given in the present state of our knowledge, but there is undoubtedly a well-marked group which might well be named the "Khurdopin group." On the map they are shown approximately as follows:

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	24,100	36° 08′	75° 27′	42 P (from Visser, 1925)
—	23,000	36 07	75 34	
—	21,780	36 15	75 36	
—	21,250	36 17	75 36	
—	20,460	36 08	75 38	

(f) *Virjerab group*, a group of mountains at the head of the Virjerab glacier and between that glacier and the Khurdopin. The limits of this group should at present be undefined, as it has not been triangulated and is little known.

—	21,180	36° 11′	75° 39′	42 P (from Visser, 1925)
—	21,510	36 09	75 43	
—	20,720	36 11	75 43	

(C) *Panmah Muztagh:* Maps 42 P, 51 D, 52 A.

(a) *Nobande Sobande group*, at the head and left of the Nobande Sobande glacier, as far as about long. 75° 57′. This group is only roughly known, first from Godwin Austen's surveys (1861) and latterly from those of the Spoleto expedition of 1929. One peak only has been named and its height is not yet known with any accuracy. The spelling, *Nobande Sobande*, used on Spoleto's map is probably more correct than Nobundi Sobundi of Godwin Austen. *Panmah* is similarly more correct than Punmah.

Bobisghir	—	36° 02′	75° 48′	42 P (from Spoleto, 1929)

(b) *Drenmang group*, the mountains of the main watershed from about longitude 75° 57′ (Spoleto's map) eastwards, including those at the head of the Drenmang glacier as far south as latitude 35° 59′. Skamri is an important massif of this group, but its height and topography are not yet known in any detail.

(c) *Chiring group*, at the head of the Chiring glacier, south of the Drenmang group as far as the West Muztagh pass.

No peaks have been defined accurately for height in these three groups of the Panmah Muztagh, and no names except Bobisghir and Skamri have been given.

(d) *Choktoi group*, between the Choktoi glacier and the Nobande Sobande glacier. At present we know very little of the group and no peaks have been fixed by triangulation.

(e) *Latok group*, between the Biafo glacier and the Choktoi and Panmah glaciers. There is undoubtedly a high group here at the head of the Latok tributary glacier of the Biafo. Three summits have been triangulated and are listed below. For a discussion on them and their relation to surrounding topography, see *Himalayan Journal*, vol. vi, 1934, p. 71.

—	23,900	35° 56′ 54″	75° 45′ 11″	Pk. 18/43 M
—	23,440	35 55 43	75 49 24	Pk. 19/43 M
—	22,790	35 55 14	75 50 21	Pk. 20/43 M

Conway named the first "the Ogre"; Mrs. Bullock Workman considered the illustration given by Conway as "the Ogre" was of a smaller mountain nearer to the Biafo, and named the 23,900-foot summit "Kailasa," showing it with a

height 23,914 feet. Auden agreed with the Workmans that "the Ogre" of Conway was not the high peak, and stated that this faulty identification of Conway had thrown out the position of the Biafo glacier on his map. It appears to us too early to assign names to individual peaks of this group, but we recommend that neither "the Ogre" nor "Kailasa" should be adopted.

(D) *Baltoro Muztagh:* Map 52 A.

(a) *Paiju group*, at the extreme western end of the Baltoro Muztagh, includes the mountains west of the main trunk of the Trango glacier tributary of the Baltoro. It includes the mountains enclosing the Surgus, Börum, and Choricho glacier tributaries of the Panmah, as well as the remarkable Paiju Peak (21,650 feet), with its strata set vertically, which gives it an "organ-pipe" appearance (for illustrations see De Filippi's 'Karakoram and Western Himalaya,' particularly Panorama B, which shows the whole of the Baltoro Muztagh from Paiju Peak to Gasherbrum; see also *Himalayan Journal*, vol. ix). The coordinates of Paiju Peak are approximately 35° 43′ 00″, 76° 07′ 00″, 21,650 feet.

(b) *Trango group*, east of the Paiju group, includes the mountains east of the main trunk of the Trango glacier and those west of the Dunge glacier (longitude 76° 13′). The heights of various conspicuous summits are given on Spoleto's map between the Trango and Dunge glaciers, but we do not know the height of the most conspicuous summit, the Trango Tower. The spelling Trango is probably better than Spoleto's Tramgo, or the older Survey spelling Trahonge.

(c) *Lobsang group*, at the head of the Muztagh glacier and its tributaries.

The glaciers here are shown incorrectly on Conway's map. Ferber's map, in *Geogr. J.* 30 (December 1907), shows the glaciers better, but they are shown best on Spoleto's map of 1929. Abruzzi (1909) did not survey them. We suggest the name *Lobsang group* from the ancient camping ground of Lobsang Brangsa in the trough of the Muztagh glacier. This name "Muztagh glacier" was apparently given by Ferber as leading to Younghusband's East Muztagh pass, and has been adopted since by Abruzzi and Spoleto, though it is not the local name. Three summits are conspicuous; their heights are known with fair accuracy, and they have been named.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Biale (*6729* m.) ..	.. *22,080*	*35° 49′*	*76° 15′*	Spoleto
Lobsang (*6225* m.)	.. *20,420*	*35 48*	*76 18*	Spoleto
Muztagh Tower (*7273* m.)	*23,860*	*35 50*	*76 22*	Spoleto

Biale is spelt Piale on Conway's and Ferber's maps, when used for the glacier name. Guillarmod gave Biale and De Filippi followed suit. Spoleto's map gives Biale for both peak and glacier, as well as the height; and as his party spent some time in the region, his spelling should, we think, be accepted.

"Seven Pagodas" was given as a descriptive name by Ferber, who shows an illustration in *Geogr. J.* 30 (December 1907). Lobsang Brangsa, "Lobsang camping-ground," is at the foot of the peak, and we suggest the name *Lobsang* instead of "Seven Pagodas" for the peak. The height is from Spoleto's map.

The Muztagh Tower is one of the most striking peaks in the whole Karakoram, and has been commented upon by almost every traveller to those parts from Conway onwards. Conway named it; there are some striking photographs of it in De Filippi's 'Karakoram and Western Himalaya.' It is now so well known in Karakoram literature and is so suitable for this great rock tower that it would be right, in our opinion, to retain it. Its height has been determined

by photographic survey as 7273 metres (23,860 feet). It is far more conspicuous than the lower "Black Tooth," which rises to the south-east to a height of 6719 m., and is part of the same massif. (We think that "Black Tooth" was named by Ferber, and are not absolutely certain of its position on Spoleto's map.)

Spoleto's map shows another great peak with a height of 6974 m. (22,550 feet) at the head of "the Younghusband glacier." Nothing is as yet known of this summit, and we suggest that it be at present excluded from any group. We also suggest provisionally re-naming the "Younghusband glacier" the *Biange glacier*, from the camping-ground used by Abruzzi at its mouth, or possibly leaving the glacier unnamed.

(d) *K^2 group*, at the head of the "Godwin Austen glacier."

The name "Godwin Austen glacier" was given by Conway. Being a personal name, it is unsuitable, as are the other personal names in this region, such as the Savoia pass, the Savoia glacier, De Filippi glacier, Sella pass, which all first appeared on Abruzzi's map after his 1909 expedition.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	*23,520*	*35° 50′ 30″*	*76° 26′*	(7170 m. Spoleto)
—	*23,830*	*35 52*	*76 27*	(7263 m. Spoleto)
—	*22,330*	*35 51*	*76 29 30″*	(6805 m. Spoleto) (22,490 feet Abruzzi)
K^2	28,250	35 52 55	76 30 51	Pk. 13/52 A
—	25,354	35 52 40	76 31 45	Pk. 14/52 A (Abruzzi)
Skyang Kangri ("Staircase")	24,750	35 54 40	76 33 35	Pk. 12/52 A
—	*23,020*	*35 56*	*76 34*	(Mason)

Only the more important summits have been included in the above list, from the Survey of India triangulation pamphlet 52 A, from Spoleto's map, and from the Shaksgam survey, 1926.

Peak 22,330 is the highest summit on the south ridge of K^2. Peak 25,354 is not a true peak, but merely a shoulder or flattening of the steep east ridge of K^2. Abruzzi's height for "Staircase peak" (24,078 feet) is much too low. Two photographic heights from the 1926 results, based on the height of K^2 (28,250) gave closely agreeing heights with a mean of 24,750 feet. Spoleto's map follows Abruzzi and gives 7339 m.=24,078 feet. Professor Mason is convinced this is wrong.

The surveyor's name *Skiyang Lungpa* would be better spelt Skyang Lungpa. Skyang or Kyang means "wild ass." The initial "s" before consonants "g," " k," and "p," which is silent in some parts of Tibet, is generally pronounced in the Ladakhi dialect, *e.g.* Spiti, Skyangpo-che (see *Rec. Surv. of India*, xxii, pp. 172–3).

This name "Skyang Lungpa glacier" is much more suitable for the glacier draining eastwards from "Staircase Peak" than the "Windy Gap glacier" (*Ghiacciaio della Sella dei Venti*), which was given by Spoleto; and if it is accepted, we suggest that "Staircase Peak" be re-named *Skyang Kangri* ("the ice-mountain of the wild ass") from the glacier.

(e) " *Broad* " *group*, bounding the "Godwin Austen" glacier on the east.

The name "Broad Peak" was given by Conway in 1892. There are no Survey

of India triangulated points in this group, and Conway did not determine the height of the highest point. On Abruzzi's map the height of Broad Peak is given as 27,132 feet, but no peak of that altitude was found by Mason in the region in 1926. Mason's photographic height for the highest peak, in almost exactly the same position as Abruzzi's Broad Peak, was 26,400 feet (see *Geogr. J.* (October 1927) 349, and stereographic survey map accompanying that paper). The other peaks given below are from Spoleto's map, on which he has shown a height of 8051 metres (26,414 feet) for the highest peak, and approximately the same heights as Abruzzi for the others, except point 25,330, for which Abruzzi gives 26,188, which seems also too high. Spoleto's metric heights have been included below.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	.. (7930) 26,017	35° 50′ 25″	76° 33′ 40″	Pk. 15/52 A
—	.. *(7862) 25,925*	*35 49*	*76 33 40*	52 A
Broad Peak	.. (8051) 26,414	35 48 35	76 34 25	Pk. 16/52 A
—	.. *(7721) 25,330*	*35 48 20*	*76 34 40*	[1] Pk. 17/52 A
—	.. (7470) 24,510	35 47 50	76 35 30	Pk. 18/52 A

(f) *Gasherbrum group*, the conspicuous group at the head of the main trunk of the Baltoro glacier, comprising two main massifs.

On Conway's map Gasherbrum I is named "Hidden Peak," and the name Gasherbrum is reserved for the massif containing peaks II, III, and IV, which rise from a long east-to-west ridge. Gasherbrum I is hidden from the main Baltoro glacier by peak 24,019 (pk. 22/52 A) which rises from the southern ridge of Gasherbrum IV. It is by far the most conspicuous of the group from the south and east. We prefer to retain Gasherbrum I, and to drop "Hidden Peak."

The Survey of India triangulated positions were all checked by photographic survey in 1926. Mason's positions and heights of Gasherbrum I and II agreed almost exactly with the Survey of India values, but his heights for Gasherbrum III and IV were 26,000 and 26,180 instead of 26,090 and 26,000, making IV slightly higher than III. We prefer however the Survey heights, as only the tips were seen by Mason; the Survey heights are given below. These were accepted on Spoleto's map.

Of the other peaks included, 24,500 is a prominent summit on the eastern arête of Gasherbrum II (the height 7772 m. or 25,500 feet shown on Spoleto's map is not correct, the ridge east of Gasherbrum II falling much more steeply than is shown). Points 24,019 and 22,980 are conspicuous summits on the south ridge of Gasherbrum IV, the heights being taken from Spoleto's map in preference to Abruzzi's, which gives 24,019 and 23,589 respectively.

Gasherbrum IV	.. 26,000	35° 45′ 38″	76° 37′ 02″	Pk. 19/52 A
Gasherbrum III	.. 26,090	35 45 36	76 38 33	Pk. 20/52 A
Gasherbrum II ..	.. 26,360	35 45 31	76 39 15	Pk. 21/52 A
— ..	.. *24,500*	*35 45*	*76 39*	(Mason)[2]
— ..	.. 24,019	35 43 50	76 36 50	Pk. 22/52 A
— ..	.. *22,980*	*35 42 30*	*76 38*	(Spoleto)
Gasherbrum I (Hidden Peak)	.. 26,470	35 43 30	76 41 48	Pk. 23/52 A

[1] It is uncertain whether this point, 25,330, is exactly the same as Abruzzi's 26,188 (35° 48′ 15″, 76° 35′ 10″); but Mason does not believe that this shoulder on the south-east ridge of the Broad peak is over 26,000 feet, and we consider it better to accept the heights from Spoleto's map.

[2] For position see *Geogr. J.*, October 1927, map accompanying "Stereographic survey of the Shaksgam."

(E) *Siachen Muztagh:* Map 52 A, 52 E.

(a) *Sia group*, at the extreme head of the Siachen glacier. It was named by Mrs. Bullock Workman, after her 1912 expedition, "King George V group," a name which has never been accepted by the Survey of India. Siachen means "great rose," the Siachen glacier being so named because of the wild rose bushes near its snout. We suggest the name Sia group, partly because of the name Siachen, and partly because of the connection of the rose with British royalty, thus giving some recognition to the wishes of the explorer.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Sia Kangri	24,350	35° 39′ 51″	76° 45′ 43″	Pk. 41/52 A
—	23,270	35 37 59	76 47 29	Pk. 42/52 A
—	21,440	35 36 36	76 50 08	Pk. 43/52 A

Mrs. Bullock Workman's map of the Siachen glacier, which shows this group, is published in *Geogr. J.* 43 (1914) 232. The three peaks are those numbered 17, 16, and 15 in the list of her triangulator, Grant Peterkin, and have been accepted in the Survey of India triangulation pamphlet 52 A. The first two were named by her "Queen Mary " and "Mt. Hardinge," names which were not accepted by the Survey of India. We suggest the name *Sia Kangri*, "the ice-mountain of the rose," for the highest. (Photographs by the Workmans in 'Two summers in the ice-wilds of the Eastern Karakoram,' pp. 192, 194.)

Dyhrenfurth's expedition to the upper Baltoro in 1934 maintained that the highest point in the Sia massif ("Queen Mary peak") was over 25,000 feet. It does not seem likely that the Survey of India triangulators, including Collins in 1911, and Mason in 1926, who were definitely on the look-out for high peaks, would have missed one of that altitude. (For a discussion on this point see *Himalayan Journal*, vol. 7, 1935, pp. 145–7.)

(b) *Staghar group*, the mountains on both sides of the Staghar glacier, bounded on the west by the Urdok glacier and on the south by the Siachen glacier. The highest peak fixed prior to Visser's expedition in 1934 was the following, which was obtained by stereo-photogrammetry in 1936 (Mason), which may be verified from Khan Sahib Afraz Gul's plane-tables on the Visser expedition.

—	*21,300*	*35° 47′00 ″*	*76° 46′00 ″*	—

(c) *Singhi group*, at the head of the large left-bank tributaries of the Singhi glacier. The Singhi glacier was first seen by Mason in 1926, and was crossed by members of the Spoleto expedition in 1929, who named it. It was crossed again by Visser with two surveyors, and surveyed by them.

On the blue print of 52 A, showing Afraz Gul's work compiled with the older surveys, the word is spelt *Singi*. Unless there is any special reason for the change, the older spelling of those who gave it, *Singhi*, should be retained.

The group was well fixed by Peterkin on the Bullock Workman expedition to the Siachen glacier in 1912, the highest, 23,630 feet, being named Mount Rose, but for which a better name, in our opinion, would be *Singhi Kangri*. The three peaks are Nos. 20, 21, and 22 of Grant Peterkin's lists (Map, *Geogr. J.* 43 (1914) 232), and have been accepted in the Survey of India pamphlets as Peaks 45, 44, and 49, 52 A.

—	22,360	35° 35′ 47″	76° 57′ 32″	Pk. 45/52 A
Singhi Kangri (Mt.Rose)	23,630	35 35 56	76 59 05	Pk. 44/52 A
—	20,300	35 32 36	76 59 23	Pk. 49/52 A

(d) *Teram Kangri group*, a group first seen by Dr. T. G. Longstaff in 1909,

after crossing the Saltoro pass or Bilafond La on to the Siachen glacier. It was first triangulated by V. D. B. Collins, Survey of India, in 1911, but without a very good connection to India triangulation. It was next surveyed in more detail by Grant Peterkin, of the Bullock Workman expedition in 1912 (*Geogr. J.* 43 (1914) 232). The name *Teram Kangri* was given in Dehra Dun by Dr. Longstaff, with the approval of Sir Sidney Burrard, Surveyor-General, from the only locality place-name *Teram*, in the region. The alteration of the spelling to *Tarim* by the Workmans for the glacier tributary of the Siachen is incorrect.

The group was resurveyed from the north by Mason in 1926 by stereophotogrammetry, based on resection from well-fixed Survey of India triangulated points. Remarkable agreement was obtained with Peterkin's results. The summits below have been given their values from Mason's survey, as these have been used by both Spoleto and Visser for their subsequent surveys in 1929 and 1934. They will be found in the stereographic map of the Kyagar glacier in *Geogr. J.*, October 1927. Collins' and Grant Peterkin's values are given in brackets for comparison.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Teram Kangri III ..	24,218*	35° 35′ 50″	77° 03′ 11″	Mason
(Pk. 14/52 E)	(24,218*	35 35 50	77 03 11	Collins)
(Siachen No. 23)	(24,240	35 36 02	77 03 00	Peterkin)
Teram Kangri I.. ..	24,489*	35 34 38	77 05 04	Mason
(Pk. 15/52 E)	(24,489*	35 34 38	77 05 04	Collins)
(Siachen No. 24)	(24,510	35 34 43	77 04 54	Peterkin)
(Pk. 163/52 E)	(24,430	35 34 46	77 05 04	De Filippi)
Teram Kangri II ..	24,300	35 34 05	77 05 30	Mason
(Siachen No. 25)	(24,300	35 34 11	77 05 25	Peterkin)
(Unnamed)	22,920	35 33 18	77 07 40	Mason
	(*22,890*[1]	35 33 22	77 07 45	Peterkin)
(Unnamed)	22,530	35 33 02	77 08 15	Mason
(Siachen No. 26)	(22,530	35 33 08	77 08 16	Peterkin)
Apsarasas I	23,770	35 32 23	77 09 03	Mason
(Siachen No. 27)	(23,770	35 32 22	77 09 01	Peterkin)
Apsarasas II	23,750	35 32 04	77 10 18	Mason
Apsarasas III	23,740	35 31 05	77 12 30	Mason

* The position and height drums were adjusted on Teram Kangri I to Collins' triangulated height for this summit, and checked on Teram Kangri III. All the other positions and heights are quite independent of both Collins' and Peterkin's results. We have only given the three highest summits of the Apsarasas ridge, but Mason found three other summits over 23,000 feet near the last, namely:

—	23,580	35° 31′ 12″	77° 11′ 30″	—
—	23,710	35 31 12	77 12 47	—
—	23,570	35 31 15	77 13 11	—

Grant Peterkin's Peak No. 28 (23,350, 35° 31′ 57″, 77° 08′ 40″) is not on the main ridge, but on the south-west arête of Apsarasas I, while his Peak No. 29

[1] Clinometer height.

(23,010, 33° 31′ 05″, 77° 11′ 21″) seems to be a summit on the south-west arete of the first of the three summits, 23,580, listed above. These two peaks of Peterkin were hidden from the north.

Wood's Pk. 16¹/52 E (23,720, 35° 31′ 09″, 77° 12′ 46″) is almost certainly the same as Mason's 23,710, 35° 31′ 12″, 77° 12′ 47″, shown above. Mason was unable to identify his Pk. 16²/52 E (23,680, 35° 31′ 08″, 77° 12′ 40″), probably a minor point on the Apsarasas III ridge, which extends westwards to 23,580 and eastwards to 23,570.

The Apsarasas ridge was named by Grant Peterkin. We recommend the adoption of the names Apsarasas I, II, and III.

(e) *Kyagar group*, a high group between the Singhi and Kyagar glaciers, surveyed by Mason in 1926. The summits listed below are from the detailed stereographic survey map of the Shaksgam glacier in *Geogr. J.*, October 1927.

The group extends further northwards with several summits above 20,000 feet. It was not surveyed on the Spoleto expedition of 1929, but the western side of it was probably surveyed during the Visser expedition in 1934.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Kyagar I	21,770	35° 34′ 43″	77° 08′ 48″	
Kyagar II	21,340	35 35 47	77 07 45	
—	21,110	35 36 25	77 07 20	
—	21,170	35 36 50	77 06 51	

(f) *Teram Shehr group*, at the head of the Teram Shehr glacier, east of the main trunk of the Kyagar glacier and north of the Central Rimo glacier. It comprises a rather miscellaneous collection of mountains, which have been mainly triangulated by Wood and Alessio on De Filippi's expedition of 1914.

—	22,480	35° 29′ 48″	77° 14′ 39″	(Peterkin 30)
("Highest pt. of snow ridge")	22,380	35 28 52	77 16 36	Pk. 34/52 E, Wood
("S.W. end of southern of two flat-topped hills")	21,410	35 36 37	77 25 59	Pk. 30/52 E, Wood
—	21,650	35 31 38	77 20 31	20r/52 E, Alessio
—	*21,865*	*35 29 30*	*77 22 00*	De Filippi map
("Rock pinnacle on peak. Cliffs on south side") ..	21,910	35 28 18	77 23 46	Pk. 35/52 E, Wood

Peak 22,480, which was first triangulated by Grant Peterkin during the Workman Expedition of 1912, is also shown on De Filippi's map, though it has not been entered in the Survey of India's triangulation pamphlets. Peak 34/52 E, 22,380, triangulated by Wood on De Filippi's expedition, 1914, is shown on De Filippi's map as 22,410; while Wood's Pk. 36/52 E (22,090, 35° 28′ 17″, 77° 18′ 22″), entered by Wood as a "rock pinnacle" in his lists, is not shown on De Filippi's map, its place being taken by a much lower summit, 20,745. No rock pinnacle appears here in photographs.

(F) *Rimo Muztagh:* Map 52 E.

(a) *Rimo group*, a complex group along the watershed between the Rimo glacier and the head of the Teram Shehr, and throwing out a long ridge between the two main Rimo glaciers eastwards.

De Filippi's map, published with the English edition of his book ('Himalaya,

Karakoram and Eastern Turkestan'), shows a large number of heights. In the lists below only the most important are given, from an examination of the topography. Where possible, the triangulated positions and heights have been given, and where these differ from those shown on De Filippi's map a note has been made to that effect. A few points have also been derived from Collins' triangulation of 1911, and from Visser's map made during his 1929–30 expedition.

The group extends eastwards of Peak 48 between the Central and South Rimo glaciers, and south-eastwards of Peak 53 between the South Rimo and Shelkar Chorten glaciers.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	22,512	35° 23′ 58″	77° 19′ 01″	Pk. 46/52 E (Collins) Shown on De Filippi's map as 22,515
—	*22,569*	*35 23 26*	*77 16 25*	Visser, 1929–30
("sharp cone at S. end")	23,730	35 22 32	77 21 38	Pk. 49/52 E (Wood). De Filippi and Visser both show Wood's height
—	24,188	35 21 24	77 22 15	[1] Pk. 50/52 E (Collins)
("southern of twin peaks")	24,230	35 21 22	77 22 09	[1] Pk. 51/52 E (Wood)
("centre of triple peak")	23,520	35 22 38	77 23 04	Pk. 48/52 E (Wood) (shown correctly on De Filippi)
("rounded")	22,460	35 23 09	77 23 15	Pk. 47/52 E (Wood) (shown correctly on De Filippi)
("cone-shaped") ..	22,560	35 23 38	77 23 19	(Pk. 173/52 E (Wood) (shown on De Filippi's map as 22,580)
("southern and highest point")	22,240	35 24 52	77 22 45	[2] Pk. 45/52 E (Wood)
("northern end") ..	22,180	35 24 57	77 23 03	[2] Pk. 44/52 E (Wood)

[1] There is a difficulty with these two peaks. From the above two sets of data it would appear that Peak 50 is N.E. of Peak 51, and Visser's map shows them as correctly identified. On the other hand, De Filippi shows twin peaks, roughly in the same position, of which one, with a height of 24,250, is N.W. of the other, 24,240. We have preferred the evidence of Wood, Collins, and Visser.

[2] These two points appear to be at the extremities of a north–south ridge. On De Filippi's map the southern is marked 22,240, the northern 22,150.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
("S.W. summit of double peak")	21,840	35° 19′ 46″	77° 23′ 00″	Pk. 52/52 E (Wood) (shown on De Filippi's map as 21,810)
("snow peak")	22,300	35 18 48	77 22 07	[1] Pk. 53/52 E (Wood)

(b) *North Terong group*, between the main trunk of the Siachen glacier, the Teram Shehr, and the North Terong glacier.

(Siachen No. 32) ..	21,860	35° 27′ 29″	77° 07′ 55″	Peterkin, 1912
(,, ,, 31) ..	22,910	35 27 36	77 10 49	Peterkin Pk. 17/52 E
("round-topped cone") ..	22,570	35 27 46	77 10 29	Wood, 1914, Pk. 164/52 E
(Siachen No. 33) ..	21,580	35 24 39	77 11 30	Peterkin, 1912
—	*21,636*	*35 18 30*	*77 17 30*	Visser 1929–30
—	*21,178*	*35 17 30*	*77 15 30*	,, ,,
—	*21,245*	*35 16 30*	*77 18 00*	,, ,,

It seems likely that Peaks 17 and 164 are points on the same massif, and possibly the same peaks, the first being observed by Peterkin from the west in 1912, the second by Wood from the east in 1914. The Workmans named Peak 17 "Mt. Lakshmi," which we consider unsuitable.

(c) *South Terong group*, between the Nubra valley, the South Terong glacier, and the Mamostong glacier. No peaks have been triangulated and the three noted below are from the Visser expedition of 1929–30.

—	*20,119*	*35° 12′ 00″*	*77° 19′ 30″*	—
—	*20,600*	*35 10 30*	*77 20 00*	—
—	*22,224*	*35 09 00*	*77 23 30*	—

(d) *Shelkar group*, a group between the right bank of the Shelkar Chorten glacier and the South Rimo glacier. The existing map 52 E is inaccurate on the west side of the watershed, the detail being best shown on the map of the Visser Expedition 1929–30.

("rocky peak at W. end of ridge")	21,120	35° 14′ 40″	77° 30′ 26″	Pk. 185/52 E (Wood)
("cone at E. end of ridge")	21,180	35 14 33	77 30 57	Pk. 186/52 E (Wood)
("rounded top of cone")	21,420	35 17 12	77 32 26	Pk. 107/52 E (Wood) (shown on De Filippi's map as 21,395)

(e) *Kumdan group*, an extensive group comprising the mountains on the right bank of the Upper Shyok as far south as the Saser pass, and east of the main trunk of the Mamostong glacier; the group is drained eastwards by the Chong Kumdan, Kichik Kumdan, and Aktash glaciers.

[1] De Filippi's and Visser's maps both give 22,300. The Survey of India map 52 E incorrectly shows 22,230.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
("black rock on top of snow peak")	22,980	35° 11′ 57″	77° 32′ 30″	Pk. 110/52 E (Wood)
("snow peak")	23,200	35 11 41	77 35 14	Pk. 111/52 E (Wood)
—	*21,360*	*35 15 15*	*77 37 45*	—
("highest point of snow ridge")	21,730	35 14 45	77 38 13	Pk. 109/52 E (Wood)
—	*21,035*	*35 14 35*	*77 38 25*	—
—	*21,170*	*35 13 20*	*77 40 00*	—
("snow peak")	22,040	35 09 19	77 33 47	Pk. 112/52 E (Wood)
Mamostong Kangri .. ("black rock on summit")	24,690 24,660	35 08 54 35 08 34	77 34 41 77 34 45	Pk. 12/52 E (before 1860) Pk. 113/52 E (Wood)
("summit snow peak") ..	22,520	35 08 51	77 37 26	Pk. 187/52 E (Wood)
("rounded snow peak") ..	21,820	35 07 51	77 38 37	Pk. 188/52 E (Wood)
—	23,020	35 04 43	77 38 20	Pk. 114/52 E (Collins)
—	22,133	35 03 23	77 39 22	Pk. 115/52 E (Collins)
("snow peak")	22,110	35 05 19	77 40 45	Pk. 189/52 E (Wood)

The first two listed above are not shown on De Filippi's map, but are shown on Visser's. The extreme south of De Filippi's map is not very accurate, and the topographical points should be treated with some doubt; it was only sketched from a distance. The mountains at the head of the Mamostong glacier were first explored at close range by Dr. A. Neve.

The spelling *Mamostong*, which means "the thousand demons," is, we believe, more correct than the old spelling *Murghistang*. The name "Mamostong" recalls a legend in which a number of raiders from Central Asia were destroyed by an avalanche (*Rec. Surv. of India*, vol. 22, p. 172). The chief peak, whose height was determined by Johnson during the early Kashmir survey prior to 1860 as 24,690, was refixed by Wood on De Filippi's expedition (24,660). It was likened by Dr. A. Neve to "a crouching lion." We suggest the name *Mamostong Kangri* for it.

The mountains at the head of the Aktash glaciers north of the Saser pass are not yet well enough known to be given names. Peaks 114 and 115, fixed by Collins, were not refixed by Wood in 1914, but are shown on the map illustrating his work. On De Filippi's map however they are given the heights 22,200 and 22,130, instead of 23,020 and 22,133. Neither De Filippi's nor Wood's maps are reliable in this region, the Aktash glaciers being omitted.

(G) *Saser Muztagh:* Maps 52 F, 52 J.

(a) *Saser group*, a great group south of the Saser pass, some of the peaks of which were triangulated before 1860. The group was not surveyed in detail during the early surveys of Kashmir by Mr. E. C. Ryall, and it was not till

Dr. Arthur Neve visited the Sa-kang and Phukpo-che glaciers that any details were known (Popoche, Neve, 'Thirty Years in Kashmir,' pp. 227–35). It was subsequently surveyed in detail by the Vissers in 1929, and the peaks whose coordinates are shown in italics are from that survey.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	*21,795*	*34° 54′ 38″*	*77° 41′ 55″*	—
—	24,330	34 52 25	77 44 15	Pk. 48/52 F (Wood)
Saser Kangri [1] . .	. . 25,170	34 52 02	77 45 13	Pk. 29/52 F (before 1860)
	(25,280	34 52 00	77 45 13	Wood)
—	24,590	34 50 31	77 47 16	Pk. 30/52 F (before 1860)
—	*(21,000)*[2]	*34 50 35*	*77 45 08*	—
—	*21,285*	*34 54 10*	*77 46 40*	—
—	*21,855*	*34 54 00*	*77 48 00*	—
Tughmo Zarpo [3] . .	. . *21,648*	*34 51 55*	*77 49 13*	—
—	?	*34 51 07*	*77 50 40*	—
—	*22,155*	*34 50 15*	*77 52 05*	—
—	24,650	34 48 14	77 48 22	Pk. 31/52 F (before 1860)
—	*22,777*	*34 48 09*	*77 46 25*	—

(b) *Chhushku group*, at the head of the Sultan Chhushku and other lesser glaciers draining into the upper Shyok above Kataklik. With one exception, all the peaks are given data derived from measurement from Visser's map, while some of the heights (shown in brackets) are from an examination of the contours. They are only given for the purposes of identification, and should not be accepted.

—	*?(22,250)*	*34° 52′ 35″*	*77° 52′ 50″*	—
—	*?(21,250)*	*34 52 50*	*77 55 02*	—
—	*?(21,750)*	*34 52 30*	*77 55 40*	—
—	*?(21,750)*	*34 51 55*	*77 56 20*	—
—	*?(22,000)*	*34 51 30*	*77 57 02*	—
—	*?(21,250)*	*34 52 28*	*77 57 20*	—
—	21,920	34 54 34	77 56 05	Pk. 28/52 F (before 1860)

(c) *Shukpa Kunchang group*, a high group between the two Shukpa Kunchang glaciers. The heights of all the summits are doubtful, and the positions from Visser's map by measurement.

—	*?(22,000)*	*34° 46′ 52″*	*77° 51′ 40″*	—
—	*?(22,000)*	34 45 33	77 50 21	Pk. 32/52 F (before 1860, but no height)
—	*?(22,250)*	*34 44 58*	*77 52 42*	—
—	*?(22,000)*	*34 44 32*	*77 53 37*	—

[1] Saser means "yellow ground." From Saser Brangsa the name has gone to the Saser pass, and then to the peak. Sasir is incorrect. We suggest *Saser Kangri* as preferable to Sasir Peak.

[2] This point, about 21,000 feet, was climbed by Dr. Neve and named "Panamik Peak," not very suitably.

[3] We suggest this name from the glacier draining it.

(d) *Arganglas group*, provisionally named from a grazing ground at the junction of the two glaciers draining it.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	*?21,932*	*34° 36′ 52″*	*77° 50′ 55″*	—
—	22,272	34 35 07	77 54 19	Pk. 47/52 F (Collins)

(e) *Kunzang group*, provisionally so named from the Kunzang Lungpa draining eastwards into the upper Shyok. No details are available for us to work out this group. It was surveyed by Visser in 1934.

(f) *Shyok group*, the last group of the Great Karakoram, in the bend of the Shyok river and opposite the village of Shyok. The peaks listed are all from the Changchenmo triangulation done by Johnson and Clarke in 1862. The heights of only two peaks were determined, but those of the others should be available from Visser's survey of 1934, the details of which are not yet available to us.

—	—	34° 20′ 03″	78° 10′ 08″	Pk. 3/52 J
—	—	34 18 56	78 09 26	Pk. 4/52 J
—	21,070	34 18 20	78 13 07	Pk. 5/52 J
—	21,100	34 17 55	78 11 37	Pk. 6/52 J
—	—	34 17 25	78 10 15	Pk. 7/52 J
—	—	34 15 54	78 12 33	Pk. 8/52 J
—	—	34 15 23	78 11 30	Pk. 9/52 J

APPENDIX II: MOUNTAIN GROUPS OF THE LESSER KARAKORAM

Groups North of the Great Karakoram in Hunza

A (i) *Lupghar group* (42 L). This group lies between the Batura glacier, the Chapursan, and the Hunza river. It is believed that no mountains in the group rise above 20,000 feet, but there are several snow-clad summits over 19,000 feet.

A (ii) *The Ghujerab mountains* (42 P). Two groups may be recognized in the mountains of Ghujerab, viz. the Chapchingal group and the Karun Kuh group.

(a) *The Chapchingal group* lies between the Kuksel and Chapchingal tributaries of the Khunjerab and Ghujerab rivers respectively, and on both sides of the Chapchingal pass. No peaks have been triangulated, but the following three are shown on the Survey of India map 42 P. They are from K. S. Afraz Gul's survey with the Visser expedition, 1925. We suggest the name *Chapchingal Sar* for the highest.

Chapchingal Sar ..	*21,210*	*36° 45′ 36″*	*37° 18′ 05″*	—
—	*20,730*	*36 43 05*	*37 23 55*	—
—	*20,070*	*36 42 50*	*37 28 55*	—

(b) *The Karun Kuh group* lies between the lower Ghujerab and the lower Shimshal valleys, of which the culminating summit is the mountain known as Karun Kun, about 6 miles north-east of the Karun Pir (pass), which has been fixed by triangulation, during the Indo-Russian work, 1912–13.

Purzin-wa-dasht ..	*20,786*	*36° 39′ 10″*	*75° 06′ 30″*	—
Karun Kuh	22,891	36 36 47	75 04 48	Pk. 19/42 P
—	*20,147*	*36 34 30*	*75 11 30*	

Groups South of the Great Karakoram

(B) The Rakaposhi range may be divided into five groups, of which something is known at present, though it cannot be said that we have anything more than rough maps, except in the Bagrot and Haramosh valleys, which the Survey of India mapped in 1931. In 1892 Conway made a plane-table sketch of the Hispar glacier, but the side valleys were extremely roughly sketched, and it is uncertain whether he correctly identified the few triangulated summits of the Survey of India. The Workmans made two expeditions, one to the Chogo Lungma glacier in 1902, and the other to the Hispar in 1909, and with each record of their journeys they published large-scale maps. Unfortunately, here again they seem to have had great difficulty in recognizing fixed points, owing to faulty initial azimuths and base measurement; it is extremely difficult to fit their work in with the work of others, and their heights must remain in doubt. Where possible the names given by these travellers have been entered for the purposes of identification and their approximate positions on the Survey of India map given in order to place them in relation to the general topography of the sheet.

The five groups are the Rakaposhi group, the Bagrot group, the Phuparash group, the Chogo Lungma group, and the Hispar Wall.

(a) The *Rakaposhi group*, on the extreme western end of range, rising steeply from the Hunza gorge at Chaichar Parri. Only one summit of the Rakaposhi massif has been triangulated, and the heights of subsidiary summits are not known.

For a note on the name "Rakaposhi," see Burrard, 2nd Ed., vol. 1, p. 50. The name Rakaposhi should most certainly be retained, with the Hunza name, Dumani, as well. The peak was triangulated during the Kashmir triangulation of 1855–60, and is well fixed.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Rakaposhi, or Dumani ..	25,550	36° 08′ 39″	74° 29′ 22″	Pk. 27/42 L

(b) The *Bagrot group*. This group lies at the head of the two main tributary glaciers of the Bagrot valley, the Hinarche and Burche (called the Bagrot and Gargo glaciers on Conway's map). Conway only gives the height of one (the "Dome of Dirran"), but the "Crown of Dirran" is probably higher. The four given below are certainly over 21,000 feet.

("Crown of Dirran") ..	—	36° 07′ 14″	74° 39′ 44″	Pk. 37/42 L (Kashmir triangulation 1855–60. No height)
("Dome of Dirran") ..	*23,550*	*36° 06′ 50″*	*74° 38′ 45″*	Conway, 1892
("Burchi Peak") ..	—	*36 06 50*	*74 40 30*	Conway, 1892
("Lower Burchi Peak") ..	—	*36 06 00*	*74 41 00*	Conway, 1892

Perhaps it is yet too early to consider names for these, though we would suggest Diran I and Diran II for the first two, and Burche I and Burche II for the two last. Burch*e* is probably a better spelling than Burch*i*. Reference should however be made to the Survey of India work of 1931, which is not available to us.

(c) The *Phuparash group*.[1] An important group at the head of the Phuparash

[1] The work of the Survey of India of 1931 in sheet 42 L is not available in England, and the suitability of this group name requires confirmation after consulting that survey.

valley, four peaks of which were fixed by the triangulators in 1855–60. Conway calls the first and westernmost "Emerald Peak," and saw it from the Bagrot valley; the second and third he does not name and may not have seen, though they are marked on his map. The last, which he names "Saddle Peak," he saw from the glacier he calls the Shallihuru. The topography at the head of this glacier and its neighbour to the east is entirely different from that shown at the head of the Chogo Lungma glacier by the Workmans. In compiling map 42 L the best fit possible has been made, but it is very probably inaccurate. On that map Conway's Shallihuru is given as Miar (Shalhubu) glacier, probably from K. S. Afraz Gul's plane-table with the Vissers in 1925.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
("Emerald Peak")	.. 22,390	36° 03′ 29″	74° 45′ 57″	Pk. 42/42 L
—	22,260	36 03 03	74 46 15	Pk. 43/42 L
—	21,570	36 02 52	74 49 31	Pk. 44/42 L
("Saddle Peak")..	.. 21,570	36 02 42	74 47 26	Pk. 45/42 L

The Haramosh range branches south-eastwards from the Rakaposhi range about 2 miles east of "Saddle peak."

(d) *The Chogo Lungma group*. This group lies mainly at the head of the Chogo Lungma glacier and at the head of the Yengutz Har glacier. The Chogo Lungma was ascended by the Workmans and described by them in 'Ice-bound heights of the Mustagh.' On the north the Yengutz Har glacier was surveyed by K. S. Afraz Gul with the Vissers in 1925. It is extremely difficult to reconcile the topography as shown by the Workmans with either that of K. S. Afraz Gul on the north or with that of the Survey of India in Sheet 43 I on the west, and the three summits listed below from the Workmans' work should be treated with considerable reserve. It is unlikely that a peak as high as 24,500 feet exists here, while from the illustrations in their book, the two summits which they named "Mount Chogo" and "Mount Lungma," and which they climbed, are little more than snow knolls on the south-east ridge of "Pyramid Peak."

Chogo Lungma, which is applied to the glacier and valley to the south-east, merely means "the large valley." To call two summits towards the head of the valley "Mt. Chogo" and "Mt. Lungma," *i.e.* "Mount Large" and "Mount Valley," seems to us particularly unsuitable, and we suggest that the names be dropped and the summits left unnamed until the regular survey or next explorer finds or suggests more suitable names.

The peak at the head of the Yengutz Har glacier, for which we suggest the name *Yengutz Har*, seems to fall roughly in the position of the ridge shown on Conway's map as "the Golden Parri" (*i.e.* Golden Cliff, or "Ghenish Chish"), but Conway's topography here is unrecognizable on the modern survey. The name for this glacier was first obtained by Sir Henry Hayden when examining glaciers in the neighbourhood about 1906; it was then spelt *Yengutsa*. Gilgit officials who later visited it stated that the correct spelling should be *Yengutz Har*, and this name is now in general use in glacier literature.

("Pyramid Peak")	.. *24,500?*	*36° 03′ 15″*	*74° 54′ 30″*	—
("Mt. Lungma")	.. *22,568?*	*36 02 20*	*74 55 00*	—
("Mt. Chogo") ..	.. *21,500?*	*36 02 03*	*74 55 30*	—
Yengutz Har ..	.. 23,056	36 03 28	74 58 00	Pk. 68/42 L

(e) *The Hispar Wall*. All along the southern side of the Hispar glacier there is a mountain wall, from which, on the west, a series of short glaciers descends to the Hispar. The wall was crossed at one place by Bruce in 1892, the pass being known by the name "Nushik La" (36° 01′ 30″, 75° 14′ 25″).

No summits have been triangulated along this wall, and the points noted below are either from K. S. Afraz Gul's plane-table on the Visser Expedition of 1925 or from the Workmans' map in 'The call of the snowy Hispar.' In view of the fact that the Workmans failed to recognize the Survey of India triangulated points, the positions and heights of the points from their map should be treated with reserve.

The names for the first three summits are from the glaciers draining northwards from them, and are from K. S. Afraz Gul's work. Makorum is presumably the same as the point marked 23,635 on the Workmans' map.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Gurpaltig	*20,700*	*36° 05′ 28″*	*75° 01′ 02″*	(Afraz Gul)
Chandershish	*22,300*	*36 03 06*	*75 04 45*	(Afraz Gul)
Makorum	*23,750*	*36 03 25*	*75 07 04*	(Afraz Gul)
—	*22,508*	*36 01 35*	*75 24 35*	(Workman)
—	*22,710*	*36 01 26*	*75 31 05*	(Workman)
—	*21,358*	*36 01 04*	*75 34 27*	(Workman)
—	*22,060*	*36 00 52*	*75 36 02*	(Workman)

Subsidiary groups associated with the Rakaposhi range

(f) *The Ganchen group*, between the Hoh Lumba and the Basha river. Very little is known about this region and it has not been surveyed in detail. One summit only, Ganchen, 21,200 feet, has been fixed by triangulation. In 'Ice-bound heights of the Mustagh,' pp. 54, 58, the Workmans show photographs of some of the peaks of the group further north, one of which, which they call *Hikmul*, may be as high as Ganchen. They explored a small glacier west of Ganchen.

Ganchen	21,200	35° 48′ 36″	75° 29′ 11″	Pk. 9/43 M, 1855–60

(g) *The Meru group*, between the Hoh Lumba and the Biafo glacier. There is undoubtedly a high group here, but nothing is known of it. During the old survey no peaks were triangulated in the group, and Conway fixed none. The Workmans named a high peak *Meru*, and assigned an approximate height of 22,000 feet to it; this is probably too high. An illustration of part of Meru appears in *Himalayan Journal*, vol. vi, 1934, p. 71.

(C) *The Haramosh Range*. Little is known about the detailed topography of this range. A few of the higher summits towards the north of it have been fixed by triangulation, but it is too early yet to attempt a classification of groups. It seems to us probable that the Workmans never properly identified Haramosh when they explored the head of the Chogo Lungma glacier, and therefore their representation of the topography in that region is very probably at fault. Certainly it is impossible to fit it in with the modern Survey of India work west of that mountain. No details are known of the heights of the range south-east of Pk. 1/43 M, and it seems likely that none rises above 21,000 feet. The peaks above 20,000 feet in the range which have been triangulated are given below.

The height of Peak 59 was not fixed during the triangulation. It has subsequently been found to be approximately 20,190 feet. Pk. 60/43 I (35° 46′ 02″, 74° 58′ 02″) falls in the same category, but as its height was found subsequently to be approximately 19,850 feet, it is not listed. The Workmans add another peak with a height of 21,930, but it would be unsafe to assume it to be correct.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
—	24,470	36° 00′ 14″	74° 52′ 34″	Pk. 46/42 L
—	22,810	35 57 26	74 57 47	Pk. 56/43 I
—	21,930	35 51 40	74 57 54	Pk. 57/43 I
Haramosh	24,270	35 50 29	74 53 52	Pk. 58/43 I
—	20,190	35 47 45	74 57 12	Pk. 59/43 I
—	20,740	35 52 00	75 03 28	Pk. 1/43 M

1855–60

(D) *The Masherbrum Range.* The range extends from the junction of the Basha and Braldu rivers, south of the Baltoro glacier, as far east as the Chogolisa Saddle, east of Chogolisa or " Bride Peak." It is not known in detail throughout its length, but certain well-marked groups can be distinguished.

(a) *The Koser Gunge group*, on the extreme west as far as the Skoro La.[1] The height of only one summit is known with any degree of accuracy, and this has not been triangulated.

Koser Gunge	21,000	35° 37′ 10″	75° 39′ 00″	—

(b) *The Mango Gusor group*, lying immediately east of the Skoro La. Its eastern boundary cannot yet be determined.

Mango Gusor	20,630	35° 34′ 41″	75° 55′ 14″	Pk. 21/43 M, 1855–60

No topographical details are known of the range east of Mango Gusor until the Masherbrum group is reached.

(c) *The Masherbrum group.* Little is known of the Masherbrum group. Every expedition up the Baltoro seems to have passed it by. In the Survey of India Records there are two summits triangulated, both over 25,000 feet, from the south. The early survey carried out from the south was very sketchy in the higher valleys of the Hushe valley. Mr. J. A. Sillem in 1903 explored the Hushe valley from the south, but left no account of his work, and died soon afterwards (*H. J.*, vii, 1935, p. 66). The Workmans in 1911 made some minor corrections to the topography and reached the watershed both east and west of Masherbrum, but added little to our knowledge of the massif. A number of illustrations showing Masherbrum from the north have been published by various travellers, which make its outline well known from that direction (*e.g. H. J.*, vii, 1935, p. 142). Other aspects of the mountain appear in the Workmans' book, 'Two summers in the ice-wilds of the Eastern Karakoram,' pp. 84, 98.

Masherbrum E. ..	25,660	35° 38′ 36″	76° 18′ 31″	Pk. 7/52 A
Masherbrum W. ..	25,610	35 38 29	76 18 23	Pk. 8/52 A

(d) *The Chogolisa group.* No further details of the topography of the range are known until the head of the Kondus valley is reached. We then come upon a group which has been explored in considerable detail by the expedition of the Duke of the Abruzzi in 1909. To this the name "Chogolisa group" has been suggested by the Workmans on the south, and this name seems suitable.

("Mitre Peak")	20,462	35° 42′ 50″	76° 29′ 50″	Abruzzi
		35 43 30	76 30 15	Spoleto
—	21,896	35 39 10	76 33 10	Abruzzi and Spoleto
—	22,477	35 38 10	76 32 30	Abruzzi and Spoleto

[1] For a brief history of the Skoro La and a discussion on its height, see *Himalayan Journal*, vol. i, 1929, p. 89. For an illustration of it, see *ibid.*, vol. vi, 1934, p. 70.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
Chogolisa II	24,783	35° 36′ 45″	76° 34′ 00″	Pk. 24/52 A, Abruzzi
Chogolisa I ("Bride Peak")	25,110	35 36 44	76 34 23	Pk. 25/52 A, 1855–60 Survey of India
—	*21,653*	*35 36 20*	*76 38 50*	Abruzzi
Baltoro Kangri ("Golden Throne")	*23,990*	*35 38 50*	*76 40 00*	Abruzzi

The positions of "Mitre Peak" as given by Abruzzi and Spoleto do not agree with each other; both positions have been given in the table above. "Mitre Peak" is a very striking rock peak named first by Conway, and separated from the rest of the Chogolisa group by the "Vigne glacier."

The height of "Golden Throne" is in doubt. Conway and Abruzzi gave no height for it; Spoleto's height is given above; on the Survey of India map it is shown as 23,600 feet, but I do not know the source, since the peak has not been triangulated nor surveyed by the Survey of India. Dyhrenfurth accepted 23,990 feet, and basing his calculations on this, claimed that "Queen Mary" was over 25,000 feet, whereas its triangulated height is 24,350 feet. It seems therefore possible that the height 23,990 feet for "Golden Throne" is too high. The summit is of snow and not sharply defined (see *Himalayan Journal*, vol. vii, 1935, pp. 144–8).

The best illustrations so far published of the group are Panoramas C, D, and O, in De Filippi's 'Karakoram and Western Himalaya,' the account of Abruzzi's 1909 expedition.

We recommend that the names "Mitre Peak," "Golden Throne," and "Bride Peak," which were given by Conway and never accepted officially, be dropped; that until the position of the first is known with greater accuracy it be left unnamed on Survey of India maps; that the name *Baltoro Kangri* for the "Golden Throne" at the head of the Baltoro glacier be adopted; and that Chogolisa be retained for "Bride Peak."

Subsidiary groups associated with the Masherbrum range

Little is known of the detailed topography of the two groups lying between the Thalle and Hushe valleys and between the Hushe and Kondus valleys, which may be given group names at a later stage. The Survey of India has not surveyed the groups in detail, and no explorer that we know of has produced any useful topographical work. Survey of India maps therefore only show a very few isolated triangulated peaks, which are given below. All three were triangulated from the Kashmir series between the years 1855 and 1860.

(e) *Group east of Thalle valley.*				
—	21,190	35° 26′ 40″	76° 12′ 53″	Pk. 1/52 A, 1855–60
(f) *Group east of Hushe valley.*				
—	22,750	35° 27′ 45″	76° 34′ 44″	Pk. 26/52 A
—	23,890	35 25 08	76 33 12	Pk. 27/52 A

(E) *The Saltoro Range*

A certain amount of detail is known about the various groups of the Saltoro, owing to the interest taken by explorers of the Siachen. Longstaff crossed the Saltoro pass, or Bilafond La, on to the Siachen glacier in 1909. He also carried

out some plane-tabling among the mountains south of that pass. His account, with a small-scale map from his material, appeared in *Geogr. J.* 35 (1910) 622–657, map p. 744. The Workmans followed in 1912, and their surveyor, Grant Peterkin, carried out additional triangulation and plane-table survey. The Workmans themselves crossed from the head of the Siachen to the Kondus by the Sia La. In 1935 John Hunt and James Waller made an attempt to climb the peak shown below as "Saltoro Kangri I" (*Himalayan Journal*, vol. viii, 1936, pp. 14–24). The Workmans' maps are published in *Geogr. J.* 43 (1914) 232, and in their book 'Two summers in the ice-wilds of the Eastern Karakoram.'

(a) *The Kondus group*, from the Sia La to the saddle between the Kondus glacier and the glacier called by the Workmans the "Peak 36 glacier."

All the summits listed below were triangulated by Grant Peterkin on the Workmans' 1912 expedition.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
("Lower Silver Throne") (Peterkin, Siachen No. 14)	20,230	35° 34′ 55″	76° 46′ 38″	Pk. 46/52 A
("Silver Throne") (Peterkin, Siachen No. 13) ..	—	35 33 47	76 45 36	Pk. 47/52 A
("The Hawk") (Peterkin, Siachen No. 10) ..	22,160	35 32 58	76 52 10	Pk. 48/52 A
("Mt. Ghent II") (Peterkin, Siachen No. 9) ..	24,090	35 31 44	76 48 33	Pk. 50[1]/52 A
("Mt. Ghent I") (Peterkin, Siachen No. 8) ..	24,280	35 31 06	76 48 07	Pk. 50[2]/52 A
(Peterkin, Siachen No. 7)	21,610	35 29 41	76 52 59	Pk. 51/52 A

The above names, given by the Workmans, have not come into general use. It is therefore not too late to give them more suitable names when the next traveller goes there. We recommend that the Workmans' names should not be adopted.

(b) *The Saltoro group*, from the above group southwards as far as the Saltoro pass, including the Bilafond Wall. There seems to be some slight discrepancy between the positions found for the two high peaks of this group by the earlier triangulation and by Collins' triangulation in 1911. There is no doubt that the summit shown in the Survey of India triangulation pamphlets as Pk. 53/52 A is the same as Pk. 35/52 A, and that Pk. 54/52 A is the same as Pk. 36/52 A. It seems essential that names should be given to these peaks, as confusion is already occurring, through some authors calling the peaks K^{36} and K^{35}, while others call them Peak 36 and Peak 35.

Photographs of various aspects of the Saltoro Kangri are published in the Workmans' 'Two summers in the ice-wilds of the Eastern Himalaya,' p. 174; in *Himalayan Journal*, vols. iv, 1932, p. 46; viii, 1936, pp. 16, 17, 20.

Sherpi Kangri	23,960	35° 27′ 54″	76° 47′ 07″	Pk. 33/52 A, 1855–60
Saltoro Kangri II ..	25,280	35 24 24	76 50 50	Pk. 35/52 A, 1855–60
—	25,136	35 24 30	76 50 51	Pk. 53/52 A, Collins
Saltoro Kangri I ..	25,400	35 24 01	76 50 55	Pk. 36/52 A, 1855–60
—	25,321	35 24 05	76 50 57	Pk. 54/52 A, Collins

Sherpi-gang means literally "the ice of Sherpi," *gang* being the form used instead of *Kang* in western Ladakhi dialect. It might be more consistent to use the form Sherpikang for the glacier, and Sherpi Kangri for the mountain at its head.

(c) *The Chumik group*, from the Saltoro pass to the Rgyong La. Little is known of the group in detail, though Longstaff carried out a rapid reconnaissance of it from the west in 1909. Peaks 8/52 E (1855–60) and 18/52 E (Collins) may be the same, and it is probable that Collins' value is the better, for Longstaff remarks: ". . . K^{12}, an elusive peak which I was never able to identify to my entire satisfaction." K^{12} is the old designation of Pk. 8/52 E.

Grant Peterkin observed two peaks of the group nearer to the Siachen in 1912, and it is possible that the Vissers may have added to our knowledge of this group in 1934.

The last two peaks, unlike the rest of Peterkin's work, have not been included in the Survey of India pamphlets.

Name	*Height*	*Lat.*	*Long.*	*Peak No. and map*
("K^{12}")	24,370	35° 17′ 46″	77° 01′ 23″	Pk. 8/52 E, 1855–60
—	24,503	35 18 13	77 00 55	Pk. 18/52 E, Collins
—	22,158	35 12 40	76 59 33	Pk. 55/52 A, Collins
—	20,460	35 22 04	77 04 47	Peterkin, 1912
—	20,180	35 20 33	77 08 14	Peterkin, 1912

(d) *The Dansam group*, a group about which very little is known between the Kondus and the Gyari valleys. One peak only has been triangulated, for which the name Dansam is suggested. It is the old K^{13}.

Dansam (K^{13})	21,870	35° 12′ 12″	76° 45′ 41″	Pk. 38/52 A, 1855–60

(e) *The Chulung group*, from the Rgyong La to the end of the range. It is a high group between the Nubra and the Lower Shyok, and it is possible that the Vissers have added to our knowledge of the topography, though we have no details. It is possible that this group should be divided into two parts, the first four being included in a northern group and the last three in a southern group.

(K^{19}) Gharkun	21,720	35° 05′ 05″	76° 58′ 09″	Pk. 39/52 A, 1855–60
—	20,960	35 01 30	77 00 29	Pk. 10/52 E, 1855–60
(D^{52})	22,400	35 01 33	77 08 58	Pk. 9/52 E, 1855–60
—	21,601	34 59 42	77 17 31	Pk. 42/52 F, Collins, 1911
—	21,334	34 55 04	77 17 23	Pk. 43/52 F, Collins, 1911
—	20,213	34 46 07	77 25 16	Pk. 44/52 F, Collins, 1911
(K^{25})	21,400	34 54 37	77 08 43	Pk. 1/52 F, 1855–60

A certain number of other points were triangulated during the earlier survey and hill-staffs erected on them; their heights however do not seem to have been observed, and they therefore have not been included in the lists.