

to the shores of the Caspian Sea. Such curves are to be found on the same line also in Hindu Kush and Elburs.<sup>1</sup>

Bogdanovitch travelled from Karghalik south-westward to the upper reaches of the Yarkand-darya. On his map he has the names Mustagh and Karakorum on the mighty range stretching south-eastward into the interior of Tibet.

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An excellent summary of Tibetan orography is to be found in MEDLICOTT'S, BLANFORD'S and OLDHAM'S *Geology*, from which it is necessary to quote a few important passages:<sup>2</sup>

The Himálayas in a general sense are well understood to be the great system of mountains which rises to the north of the alluvial plains of upper India, and forms the southern margin of the highlands of Tibet, but the limits of the range at either end are difficult to define, for it becomes continuous with the mountain ranges between India and China on the one hand and those north of Afghánistán on the other, and though it is easy to regard these as distinct ranges, once the change of general direction is well established, the absolute continuity of each with the Himálayas, where the junction takes place, shows that the elevation of the whole was part of the same great series of movements of the earth's crust.

The geographical limits they use for the Himalayas are the lines along which the stretching of the chains of hills and of the rocks they are composed of, takes a sudden bend. »On the west this line may be taken to run through the hills west of the valley of Kashmir, from where the Kara-korum Range bends into the Hindu Kush to where the Jehlam leaves the hills.» In the east it is placed near Sadiya towards the N. E.

In Vol. III, p. 182, I have quoted the views of the Geological Survey of India, where MARKHAM'S opinion about the northern, central and southern Himalaya ranges is regarded as the most popular. This view was most beautifully illustrated on SAUNDERS' map. But in 1893 it was well known to the Geological Survey of India that the orography of the Himalayas was not so simple or well defined as it was represented on Saunders' map.

In the north-western portion of the Himalayas, where alone the geography is known with any degree of completeness, four principal ranges are commonly recognized. The most northerly and most elevated of these, which appears to bend round into the Hindu Kush at its northwesterly extremity, is the Mustagh or Karakoram range, whose culminating peak, 28,265 feet high and the second highest in the world, was formerly known as K 2, but is now often named after its discoverer Godwin-Austen.

<sup>1</sup> The geological results of Bogdanovitch are, in comparison with those of others, scientifically dealt with by E. SUSS in his Bd. III of *Antlitz der Erde*, Leipzig 1901, and by F. VON RICHTHOFEN in Bd. III of his *China*, Berlin 1912.

<sup>2</sup> H. B. Medlicott, W. T. Blanford, R. D. Oldham, *A Manual of the Geology of India*. Calcutta MDCCCXCIII, p. 459 *et seq.*