Already in 1866 the Royal Geographical Society could congratulate themselves on the fine and indefatigable work of Sir ANDREW WAUGH and his assistants, a work which had carried the survey over a considerable part of the country, from the frontier of India up to the Kara-korum, the territorial limit of Kashmir. »The attempt to go beyond that point was discouraged by the Government, for fear of leading to political complications.»

Captain H. H. GODWIN-AUSTEN, who already in 1861 and 1862 had accomplished such important work in the Kara-korum, during the summer of 1863, filled up another blank — in the district of Panggong-tso. He also expressed in clear words some facts that formerly were only partly known. North of the Indus, he says,[1] from its junction with the Dras River, lies a high range of mountains which separate the Indus drainage from that of the Shayok or Nubra River. The axis and great mass of this range is granitic. Of the several passes leading over it into the Shayok valley, the Chang-la has an elevation of 17,470 and the Kay-la 18,250 feet.

Above Durgo (Drugub) he found large accumulations of alluvial sands and shingle that are seen along the large valleys of these mountains. Again his perspicacious eye observed many signs of climatic changes. The powerful force that had accumulated these materials was now extinct. Their formation and subsequent denudation was, however, as yet but little understood. The level of the plateau above Drugub »could be traced across the valley in and out of its numerous ravines in a perfectly horizontal line of a different colour, where very small portions of the alluvium still adhered to the slopes and precipices.» He estimates their thickness at the junction of the Tanksi and Drugub Rivers at 1500 or 2000 feet. In the valley of Muglib he found unmistakable signs of its having been the bed of a lake.

The low pass of Surtokh is the watershed between the Panggong-tso and Shayok and is formed entirely by loose shingle from a southern lateral ravine. If Panggong-tso had an effluent as formerly when the surrounding glaciers were double their present size, the talus would be swept away; now it is growing higher every year. A rise of 150 feet in the waters of the present lake would be sufficient to give them an exit down the valley of Tanksi.

Old shore-lines and lines of old beaches in sandbeds proved unmistakably that the lake had been higher at earlier epochs, and myriads of fresh-water shells, *Limnæa* and *Planorbis,* proved that the water had been fresh. He thinks the lake existed during the latter part of the great glacial period in the Himalayas.

Whether the scooping out of the depression in which its waters lie is due to glacial action in the first instance, when this high region was, as is most probable, deeply overlaid by ice and snow, is a hazardous question, and one highly problematical. From the

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[1] *Journal Royal Geographical Society*, Vol. 37, 1867, p. 343 *et seq.*