

From old moraines he concludes that the basin was once or twice filled with ice, while later lacustrine deposits are due to less severe changes of climate in more recent times. Although the old outlet is evident as well as the supposed dam which he found to be a large fan of 1500 feet in radius, having its lowest point 90 feet above the lake, Huntington cannot accept the view of Drew. According to Huntington, this water-parting fan does not appear to have been the cause of the formation of the lake; on the contrary, it rather appears to have been able to grow up because the former stream from the Panggong region ceased to flow. He points to the fact that the permanent stream just above Muglib has had no difficulty in keeping open the broad channel through fans as large as that at the divide. One of the smallest tributaries would not be able to dam the main stream. Neither are there any traces of a moraine that has dammed the valley. The dam theory is therefore untenable. The only alternative Huntington is able to find is that the Panggong-tso basin is closed by a rock-lip, behind which the basin may have been glacially eroded. There seemed to be nothing against this theory, for Huntington found abundant signs of glacial action, a fact that of late years has been often corroborated, especially in the Kara-korum. The authors of *A Manual of the Geology of India* also speak of the evidence of a former great extension of the Himalayan glaciers.¹ They mention glaciers which formerly were 15 miles in length, and now have dwindled to only one mile. Some glaciers once reached to below 2000 feet above the sea. Regarding the extension of the presumed Panggong glacier Huntington says: »The glacier did not come to an end at the rock-lip, as might be expected, but continued on for 20 or 30 miles as a comparatively narrow tongue giving rise to the U-shape of the outlet valley If the Pangong basin is due to glacial erosion, it is necessary to explain why in what once was a single uniform valley the part above the lip has been widened ten times as much as the part below, and deepened correspondingly.»

When travelling along the Tso-nyak, Tso-ngombo and Panggong-tso, December 1901, I also got the impression that the basin of this long series of lakes was excavated by glacier action. But as the most extended and compact region of glaciation was situated in the gigantic mountains to the north-west of the Panggong depression, where the greatest portion of the precipitation was caught, and formed enormous ice-fields, I thought that the old Panggong glacier, perhaps fed from several ice-fields, was directed from the moist parts of the mountains in the north-west to the dry plateau regions in the east. I wrote: »The impression rose in my mind, that the elongated depression in which the lakes lie, and which orographically really is a latitudinal valley, once served as the pathway for a big and massive glacier, which

¹ Op. cit., p. 484.