

The theory advanced by the explorers, the Schlagintweits and Johnson, would indicate a system in which the Kara-koram and Kuen-Luen ranges are the northern and southern crests of the same great chain, but the mountain system assigned by Humboldt to Central Asia, which divides them into great mountain chains, coinciding with parallels of latitude, is strictly the true one. Whether regarding the Karakoram as a separate chain, or as a prolongation of the Himalaya to the northward, it forms a distinct watershed between the Indus and the river-systems of Tartary or Eastern Turkistan, while the Kwen Luen constitutes a parallel chain bounding the high table-land of Tibet to the north. To the west of this elevated plateau or table-land the extensive tracts of level plain, which are its characteristic features, are no longer met with, for here they break into detached ranges, and the general level of the country sinks into the basin of the Turkistan rivers.

Thus Hayward showed that the Kara-korum and Kwen-lun were two separate systems which could not be joined as had been done since Humboldt's times. Further, it seems very likely that Hayward discovered the source of the Yarkand-darya and, although he did not reach the very source of the Kara-kash, he nearly determined its whereabouts.

His paper was illustrated by a beautiful map.¹ He has the Muztagh or Karakoram Mounts drawn as a mighty range running W. N. W.—E. S. E. with the three passes Shingshal, Muztag and Karakoram. It is shown as the great water-parting, both the Yarkand-darya and the Kara-kash having their sources on its northern side, while the Shayok and Nubra Rivers originate on the southern. The Western Kara-korum was in several details still conjectural. East of the Kara-kash River he has a Lak Tsung Range running W. N. W.—E. S. E. like the Kara-korum and nearly forming a continuation of it. His Kizil-Jilga on the Kara-kash River is certainly the same point as the Camp CCXCV, which I reached exactly 40 years later. For this point he has 16,192 feet or 4,936 m., I 5,088 m. Taldat, according to Hayward, is at a height of 15,896 feet or 4,846 m. whereas my camp CCC has 4,977 m.²

The lake east of Thaldat, on 80° Long. which is also on Johnson's map and probably had been seen by ADOLPH SCHLAGINTWEIT, is the Aksai-chin Lake as it may be called because of the lack of a better name. To the east of this lake Hayward has quite correctly made a gap in the meridional range of Johnson, for from Thaldat and somewhat farther south he could see the great open latitudinal valley stretching eastwards south of the Kwen-lun. The last-mentioned system he has represented as a sometimes double system parallel to the Kara-korum, and, to the south, sending considerable ramifications across the Tibetan plateau-land.

¹ *Sketch map of Eastern Turkistan showing the hydrography of the Pamir to the east, the true courses of the Yarkand and Karakash Rivers with all the routes from Ladak across the Karakoram and adjacent Ranges.* As drawn by the author Geo. J. W. Hayward. — Here reproduced as Pl. LVI.

² The difference is in the first case, 152 m., and in the second, 131 m. For Yarkand, Hayward has 1,167 m., where I found 1,272 m., the difference being 105 m. On Stieler's map of 1911, Yarkand has 1,270 m. Hayward's altitudes, therefore, seem to be 100 to 150 m. too low, the difference increasing with the height.