

effected made it clear that the Nissa valley did not extend so far to the S.W. as shown in the map of 1900-01 when its glaciers could be sketched only from a single distant station above the Brinjak-dawān.¹⁶

From Nissa I proceeded *via* Karanghu-tāgh to the south in a fresh endeavour to trace Johnson's passage of the main range to the latter place in 1865. In my Personal Narrative I have recorded the obstruction which the Karanghu-tāgh hillmen offered to this plan and explained its obvious reasons.¹⁷ Nevertheless with yak transport secured under great difficulties we managed to reach the big glaciers which close from the S. W. the head of the Turgap-jilga, a branch of the Busat valley.¹⁸ The ascent made on one of these, in spite of unfavourable weather conditions, made it certain that no practicable route could lie across the precipitous ice-clad range rising above those glaciers on the south, and that this range itself is distinct from the main K'un-lun chain which further south forms the watershed towards the Kara-kāsh river drainage.

An attempt to gain from the lower Busat valley another side valley beyond a high spur to the east in which I surmised the approach to Johnson's 'Brinjgá' and 'Naiá Khán Pass' to lie was frustrated by an *émente* of the Tāghliks. Thus the final elucidation of some interesting topographical questions connected with that route and the unexplored tributaries of the Yurung-kāsh to the south-east had to be left for a future occasion.¹⁹

¹⁶ Cf. *Mountain Panoramas*, p. 20, the remarks on section IV.B of the view taken from above the Brinjak-dawān.

¹⁷ Cf. *Desert Cathay*, i. pp. 195 sqq.

¹⁸ See Sheets No. 9. D. 4 and No. 10. D. 1. In the latter the line of our ascent, made over the south-eastern branch of the main glacier (*Desert Cathay*, i. pp. 200 sq.) to an elevation of about 13,600 feet, ought to have been marked, approx. in long. 79° 42'.

¹⁹ The surveys made in September, 1908, along the southern slopes of the southern main K'un-lun range (see below) allowed me to ascertain the position of the 'Yangi-dawān' by which Johnson had crossed it from the side of the Kara-kāsh (see Sheet No. 10. C. 1). But owing to the accident which prevented me from an actual ascent to the pass the position, etc., of the considerable valley separating it from the range further north which trends towards the triangulated peak 3/52 M (23,071) and which Johnson crossed by the 'Naiá Khán Pass' (18,660 feet) could be only conjecturally indicated in Sheet No. 10. D. 1.

Johnson's route is summarily described in Itinerary I appended to his report to the Superintendent, Great Trigonometrical Survey, dated April 22, 1866 (reprinted in the *Royal Geographical Society's Journal*, vol. xxxvii, pp. 1 sqq.). Its representation in the 'Map illustrating the routes taken by Mr. Johnson in travelling from Leh to Khotan and back' is necessarily affected by the extensive 'adjustment' to which his plane-table record appears to have been subjected, as explained in Major K. Mason's paper *Johnson's 'suppressed ascent' of E 61*, in *Alpine Journal*, November, 1921, vol. xxxiv, p. 54. This may account for the very considerable discrepancies between the actual topography of the K'un-lun south of Khotan and his published map, discrepancies already referred to above and discussed in more detail in my supplementary note to Major Mason's paper (*Johnson's map and the topography of the K'un-lun south of Khotan*, *Alpine Journal*, November, 1921, vol. xxxiv, p. 62).

Notwithstanding the serious defects of the map, I believe a certain agreement can be recognized between Johnson's map and the topographical data

furnished by our surveys as regards some essential features of the ground traversed by him from the Yangi-dawān to Karanghu-tāgh. Starting from the Yangi-dawān his route lay down the headwaters of a considerable stream draining eastwards into the Yurung-kāsh. Its valley manifestly corresponds to the one which in Section I. b of the photo-theodolite panorama taken from the Tōpe ridge above Karanghu-tāgh (Sheet No. 9. D. 4, lat 36° 9', long. 79° 53'; *Mountain Panoramas*, p. 12) is clearly seen separating the range above the Turgap-Busat glaciers from the more distant and higher southern main range.

For this valley I have adopted the name Chomsha-jilga which on my renewed visit to the Tōpe station in 1906 I heard applied by the less secretive of the Karanghu-tāgh people with us. But it may be noted that in 1900 I heard this name in the form of *Chomsh-jilga* used for the much smaller and nearer valley which runs down to the left bank of the Yurung-kāsh just south of the Boinak-dawān then crossed on our way to the right bank of the river. It is seen to the left of this saddle in section II. b of the photo-theodolite view from the Zilan ridge (*Mountain Panoramas*, p. 16). Considering that in 1906 we sighted from afar a well-marked track leading south-eastwards into the mountains past this little valley (see *Desert Cathay*, i. p. 209; Fig. 67), it is quite possible that the name in the former instance was used merely because the little valley in question lay on *the way to* the Chomsha-jilga.

However this may be, we can see from Johnson's map that the route by which he ascended northward after leaving the previously mentioned stream at 'Khushlash-langar' (*i. e.* Koshlash-langar, 'the halting place at the confluence') and reached the 'Naiá Khán pass', must have taken him to some point on the northern snowy range trending eastwards from Peak 3/52 M (23,071) and passing above the head of the Turgap-jilga. It is on this eastern continuation of the range, as seen in the Tōpe ridge panorama I. b near the last vertical cross-line on the right and again in the Zilan panorama II. b near the last vertical cross-line on the left, that I feel inclined to look