

significant detail of construction with reed-layers was so great as to remind me at once of the fact that Dr. Hedin on his journey of 1896 to the terminal Tārīm had found an obviously ancient route line leading from Korla to Ying-p'an, where the dried-up bed of the Kuruk-daryā branches off towards Lou-lan, marked by a series of big watch-towers.¹ His description of them strongly supported the belief that this line of towers dated back to the period when the ancient Chinese route from Tun-huang to Lou-lan and thence to the northern oases of the Tārīm Basin was first opened. The careful survey of them which I was able to make in the spring of 1915 on my way from the Kuruk-daryā to Korla has fully confirmed this belief. It has furnished conclusive evidence that these towers served as watch and signal stations along the road which connected Lou-lan with the Chinese administrative posts and military colonies established under the Emperor Wu-ti in the oases dotting the southern foot of T'ien-shan.²

Early Chinese route from Lou-lan to Korla.

The chief, if not the sole, danger which threatened the safety of this great military and trade route came, as the account of the Former Han Annals shows, from irruptions of the Hsiung-nu, or Huns.³ For these, as we have seen, the open Kara-shahr valley, with its easy approaches from Yulduz and other great grazing grounds north, must have at all times been the main gate. Experience gained during centuries on their far-flung northern borders must have proved to the Chinese commanders that the best safeguard against such attacks and raids lay in securing quick warning which would allow of timely preparation for defence. Korla and the adjacent parts of the route lay certainly nearest to the ground whence the danger of incursions threatened, and if they were to be adequately protected, a line of signal-stations pushed out to the north-east into the Kara-shahr valley would certainly suggest itself.

Danger of irruptions from Kara-shahr valley.

It is for this purpose, I believe, that the ruined watch-towers along the foot of the Khōra range are likely to have been originally constructed. At what time exactly this extension beyond Korla of the line of signal-stations took place it is impossible to determine. But it is worth noting that I found the same enlargement by an outer casing of masonry, which is so clearly marked in the case of the tower just described, also at several of the towers between Ying-p'an and Korla. The dimensions of the tower south-west of Ming-oi before this enlargement, viz. about 24 feet square at the base, are found again at stations along the Tun-huang Limes. So, too, is the method of placing layers of reeds after every three courses of bricks. Hence it appears to me very probable that the subsequent enlargement of the tower was also effected during Former Han times. Its purpose, as my observations of 1915 have suggested, was probably not so much repair or strengthening as to raise the height of the structure for making its fire-signals better visible from a great distance. In this connexion I must record my regret that neither on my rapid passage during the closing days of 1907 nor during my equally busy stay at Korla in April, 1915, could I spare time to search systematically for the remains of towers which would have served to link up the tower south-west of 'Ming-oi' with the northernmost surveyed south-east of Korla. The intervening distance is about 27 miles, and owing to the configuration of the ground, with the westernmost hill chain of the Kuruk-tāgh commanding the plains on either side, two or three signal-stations between, even without conspicuous towers, would have been amply sufficient for effecting semaphoric connexion between the two points.

Signal-stations along Khōra range.

The remainder of the ground crossed on that march to Korla offered also antiquarian and geographical interest. Within a mile or so from the tower the area of low, broken ridges was left behind, and after another five miles across a stony glaciis we approached the deep bed in which the

Defile on road to Korla.

¹ Cf. Hedin, *Reisen in Z.-A.*, pp. 75 sq.

² See *Geogr. Journal*, xlviii. pp. 208 sq.

³ Cf. Wylie, *Notes on the Western Regions*, *J. Anthropol.*

Inst., xi. pp. 95 sqq., where the reasons advanced in 90 B.C. for planting military colonies west and south-west of Korla are set forth at length.