my explorations of 1915 and in the barren hill ranges about Kelpin, known there by the designation of  $k\bar{a}k$ .<sup>10</sup> In both these hill regions I have observed unmistakable evidence that desiccation has advanced within historical and even relatively recent times. As their physical conditions show essentially the same character as those of the ground discussed here, it appears a priori very probable that this region too has experienced an advance of aridity, and that consequently in ancient times it may have presented no greater obstacle to the passage of raiders from the north than the Kelpin ranges would at the present day.<sup>11</sup>

Desiccation advanced since Limes construction. In support of such a conclusion we can point to archaeological evidence even more direct and convincing. It is to be found in the very fact that the Chinese, when constructing the Tun-huang Limes towards the close of the second century B. C., found it necessary to extend it so far west of Khara-nōr as my explorations have proved. It is obvious that if the desert north of the terminal course of the Su-lo Ho had been then as impassable through want of water as it certainly now is for parties of mounted raiders, it would have been quite needless to construct this far-flung line of wall and watch-stations over desert ground bare of all resources, and to maintain it for centuries in the face of serious difficulties.

T. xv. a probable starting-point of 'new route of north'.

I regret that the pressure of other tasks, and a variety of practical considerations connected with the season and the exhausted condition of camels and men, did not permit me to extend my explorations into this desert ground north of the Limes on either of my visits to the Tunhuang region. But if I was thus denied the chance of personally examining the ground through which I believe that ancient 'new route' to have passed, we have, I think, at least enough topographical and archaeological evidence for tracing its starting-point. The following are the main reasons which make me inclined to locate it at the ruined station T. xv. a. In the first place, we have the definite statement in the Former Han Annals which names the Yü-mên barrier as the southern end of the 'new route'. This is confirmed by the Wei lio's notice, which adds the important indication that the route 'sets out on the north-west'. We have seen that the headquarters station of the 'Jade Gate barrier', when the 'new route' was opened up at the beginning of the first century A. D., was still placed at T. XIV, and it is in its immediate neighbourhood that we may reasonably suppose the route to have passed through the actual line of wall. Now on referring to the detailed map in Plate 33 we observe that T. xv. a occupies a position particularly convenient for such a débouché from the line of the Limes. Northward it offered easy access to the bed of the Su-lo Ho, which here lies narrow and well confined between firm banks of gravel, whereas from about three miles further east it is fringed on the left bank by impassable marshy ground.12 Thus a safe crossing of the river was assured here at all seasons.

out there, the conditions still existing in those outer ranges about Kelpin made it possible down to modern times for Kirghiz raids to be carried out from the T'ien-shan valleys upon the Kāshgar-Ak-su high road. There is here a curious analogy to the conditions we must assume to have prevailed in the wastes of the easternmost Kuruk-tāgh during the period when Hun raiders from across the eastern end of the T'ien-shan could still make their way through them towards Tun-huang and the Chinese route to Lou-lan.

<sup>11</sup> This assumption furnishes also the best explanation for the old cairns marking tracks which Dr. Hedin found when passing through the desert hills of the Kuruk-tāgh on a line north of Bēsh-toghrak, and thus a considerable distance to the west of the ground here discussed; cf. Central Asia, ii. pp. 106 sq. It is impossible from the few objects found near some of these cairns to determine the period from which they date.

12 It is true that there is a short stretch of firm ground by the left bank of the river to be found just north of T. xix, where Captain Roborovsky appears to have effected his crossing in the winter of 1894, as stated above. But it is merely a narrow neck flanked by wide marshes on either side, and the ground between the high clay terraces scattered here is so low as to be probably subject to inundation at the height of the spring and summer floods. The objections to choosing this point as a crossing-place for a route to be used at all seasons are obvious.