

had greatly extended its limits since my former visit to this region. I had already become familiar in 1908 with the vicinity of the neighbouring village of Tumshuk and the road leading thence to Marāl-bāshi. When recording my observations, I had occasion to refer to the significant change which the line of the road has undergone here within living memory, where it winds round the foot of the small isolated hill chains rising island-like above the plain to the east and north-east of Marāl-bāshi.<sup>12</sup> It will suffice to point out here that, owing to the marshy condition in which annual inundations from the Kāshgar river kept most, if not all, of the low ground separating the Ōkur-mazār-tāgh from the Mazār-tāgh to the south-west, the comparatively large area now occupied by the lands of Chār-bāgh and adjacent villages was uncultivable and difficult for traffic until the Chinese reconquest in 1877. Consequently, before the gradual reclamation of that ground, the old line of the high road from Tumshuk, instead of skirting the southern extremity of the Ōkur-mazār-tāgh, lay to the north of it through the gap of Arach (Map No. 8. B. 1), which divides it from the equally rugged and barren hill chain of the Bēl-tāgh.<sup>13</sup> The more direct and far older route connecting Ak-su with Marāl-bāshi must have lain through this same gap, flanked by the remains of ancient watch stations, past the ruined sites of *Chong-tim* and *Lāl-tāgh*.

This comparatively modern diversion of the road deserves attention, because it may help to throw light on a physical change of wider geographical and antiquarian interest. I refer to the much-discussed question of the so-called 'desiccation' within historical times, in so far as it affects the Tārīm basin. As I have recently had occasion to explain in some detail elsewhere, the apparent contradiction between the two main facts brought out by the available archaeological evidence on this question can best be reconciled by assuming that the volume of water brought down by the rivers into this great drainageless basin of innermost Asia has gradually diminished (probably through the gradual reduction of the ice reserves stored up since the last glacial period in the glaciers of the high mountain ranges feeding those rivers); while the climatic conditions which account for the extreme aridity prevailing in the basin itself have undergone no appreciable change during the two thousand years or so over which our historical and antiquarian data extend.<sup>14</sup> In the absence of reliable direct records it may be difficult to determine to what extent this probable reduction in the volume of the summer floods which reach the deltaic area of the Kāshgar-daryā to the east of Marāl-bāshi has facilitated the extension of cultivation between the Mazār-tāgh and Ōkur-mazār-tāgh, with corresponding progress in the drainage of previously boggy ground. But I think we may safely recognize here a modern illustration of the physical change that has rendered the belt of ground marked by the remains of Lāl-tāgh, Chong-tim, and neighbouring sites wholly waterless since T'ang times, and has thereby caused the high road from Ak-su to be diverted to the present more southerly line.

A variety of topographical considerations support the belief that the tract in the vicinity of Marāl-bāshi must have always been favourable for the formation of a 'terminal oasis' on the Kāshgar river. I need only mention the advantages that irrigation would derive from the kind of natural barrage formed by the hill chains, which here stretch across the river's line of drainage, and from the comparatively close approach of the course of the Yārkan-daryā. This makes it possible, nowadays, for the irrigation of Marāl-bāshi to be supplemented to a very considerable extent by water from the Yārkan river. It is carried by the Zai canal, representing an old bed branching into the big lake-like reservoirs of Anār-köl and Kölde.<sup>15</sup> Importance must have

Change  
connected  
with  
physical  
causes.

Advantages  
of position  
of Marāl-  
bāshi.

<sup>12</sup> Cf. *Serindia*, iii. pp. 1309 sqq.

<sup>13</sup> See *ibid.*, iii. pp. 1311 sq.

<sup>14</sup> See my paper 'Innermost Asia', *Geogr. J.*, 1925, pp.

487 sqq.

<sup>15</sup> See Maps Nos. 5. D. 1, 2; 8. A. 1; Hedin, *Reisen in Z.-A.*, pp. 225 sq.