

familiar myself when we made our way in September, 1914, across unexplored portions of the eastern Pei-shan.¹⁶

Hsüan-tsang's route beyond Ma-lien-ching-tzū.

In any case it is certain that if at the present day a wayfarer to Hāmi had reason to avoid observation at Hsing-hsing-hsia, he could do no better than leave the main route at Ma-lien-ching-tzū and strike to the west-north-west. He would have to cross there a continuation of what appears to be the highest of the hill ranges of the Pei-shan, the one which the main road passes in tortuous gorges just above Hsing-hsing-hsia.¹⁷ On such ground it would obviously not be possible to follow a straight line, and this circumstance may well account for the passage in the narrative telling us that 'as the route made long detours, he no longer knew which direction to follow'.¹⁸ After the unsuccessful search for the 'Spring of the Wild Horses' we are told that Hsüan-tsang turned resolutely to the north-west and continued his journey undaunted by thirst and the perils of the desert. It was a resolve needing all the religious fervour and courage of the great pilgrim, but it was also the wisest course to follow—for one who knew how to keep up that bearing. And that Hsüan-tsang possessed fully that instinct of the compass, so prevalent among Chinese of whatever condition, is abundantly proved by the topographical records he has left us in his *Hsi-yü-chi*.

Marches through trackless desert.

As the map shows, this course to the north-west was bound to carry the traveller across the utterly barren gravel glacis about K'u-shui down to the Yen-tun depression, and beyond this to the south-eastern edge of the loess belt where subsoil drainage from the Karlik-tāgh supports vegetation. We are told that on this progress across the Mo-ho-yen desert he went without water for four nights and five days, until after the refreshing rest of the fifth night his hardy mount carried him a few miles beyond to pasture and water in a pool. Here we find once again that the approximate distance reckoning, as indicated by the record of the *Life*, is in as close agreement with the actual topography as we could reasonably expect; for we have seen that on the present caravan road five marches are needed to bring the traveller from Ma-lien-ching-tzū, i. e. the fourth signal-tower, to Chang-liu-shui, the first place with springs and verdure on the Hāmi side, the total marching distance amounting to about 106 miles. There may have been wells then as now on the regular route leading from the fifth watch-station to Hāmi, in positions corresponding, or near, to Sha-ch'üan-tzū, K'u-shui, Yen-tun. But how difficult, if not impossible, it would have been for Hsüan-tsang, once off the caravan track, to find them I know only too well from my own personal experience on similar desert ground. The line he followed obviously lay parallel to the route. Yet this might easily have remained hidden from him, even if approached within a few miles.

Authenticity of record in *Life* confirmed.

That it was the scent or local sense of his horse which enabled Hsüan-tsang in the end to reach the saving spring before succumbing to thirst and exhaustion distinctly strengthens, in my belief, the authenticity of the record as presented by Hui-li. We have been told in it before how Hsüan-tsang, when preparing for his adventurous start at Kua-chou, had wisely by exchange for his own secured this horse from an old 'barbarian' who had ridden it more than fifteen times to Hāmi and back.¹⁹ The remarkable way in which horses and camels in the desert can scent water and grazing from considerable distances, or correctly locate such places remembered from previous visits, is too well known to need my personal testimony.²⁰ The accuracy of Hui-li's narrative

¹⁶ Cf. *Third Journey of Exploration*, *Geogr. Journal*, xlviii. p. 200.

¹⁷ See Maps Nos. 80. A, B. I; 77. C, D. I.

¹⁸ Cf. Julien, *Vie*, p. 29; above, p. 1144.

¹⁹ See Julien, *Vie*, p. 21: "Master," said the old man, "since you are decided to start, you must mount my horse. More than fifteen times already, going and coming back, he has done the journey to I-wu. He is strong and knows

the routes. Your horse, on the contrary, is weak and will never reach there."

²⁰ But cf., e.g., *Desert Cathay*, i. p. 422.

I may add here that the fact of a horse trained to desert travel being able to go for five days without water has nothing improbable in itself. On my crossing of the Taklamakān to the Keriya River end our few ponies could not be watered for close on four days; yet judging from their condition they