

does not reach back farther than the eighteenth century.² But that the district possessed a dense population, wealth, and corresponding economic importance in much earlier periods also, is abundantly proved by the large number, size, and elaborate character of its ruins as well as by its recorded history. Irrigation must have been all through historical times indispensable to cultivation within the Turfān area. We are therefore driven to the conclusion that the water-supply brought down in streams from the mountains was more plentiful in ancient times than it is now, when subterranean drainage has to be tapped by Kārēzes in order to supplement it in a proportion which at present is probably close on one-half of the total available supply. But the clear proof of reduced water-supply that this fact affords, though it has its antiquarian bearing, can only be mentioned here incidentally.^{2a}

The juxtaposition of two territories so different in climate and produce could not have resulted in that close economic relation which still exists at present between the Turfān oases and the Guchen tract nor in that political connexion which our records attest in older times between Anterior and Posterior Chū-shih, between Kao-ch'ang and Pei-t'ing, had not the mountain range dividing them afforded, in spite of its height, easy access from the one to the other. The most direct route linking the chief places of the two territories has already been described in the preceding chapter. To the east of it the range can be crossed by two more passes, the Sardak and Kara-dawān, which, though said to be unsuited for laden animals, yet offer means of rapid intercourse for mounted men all the year round. Still farther to the east the range sinks down low enough, at the saddle of the Ku-ch'üan (Map No. 31. B. 1, 2), to permit traffic between the eastern extremities of the cultivated areas in the two territories to be carried on by camels or carts without too great a detour. Finally in the west the flank of the high Bogdo-ula massif can be turned by the still easier saddle near Ta-fan-ch'êng, which the high road to Urumchi crosses at an elevation of only about 3,500 feet, and Jimasa can thus be reached in about eleven marches.

Communica-
tions
between
Turfān and
Guchen.

It is evident that if these several lines of communication greatly facilitated economic and probably also ethnic intercourse between the two territories north and south of the snowy range, they must have also helped greatly to render them equally accessible to military aggression and political influence, whether it came from the north or the south. And this result of a geographical factor explains why we find the territories corresponding to Anterior and Posterior Chū-shih so closely linked in political fate and in the vicissitudes of war, throughout the successive periods for which the Chinese records furnish exact historical data. The community of fortune thus created is fully illustrated by what the Annals of the Former Han tell us of the part played by cis- and transmontane Chū-shih, between the Huns on the north and the Chinese power on the south, during the century and a quarter preceding the downfall of that dynasty.

Common
political
fate of both
territories.

Before noting the essential points of this story, as recorded in the *Ch'ien Han shu*, it only remains to quote the description given therein of Anterior Chū-shih. Regrettably brief as it is, it definitely settles the location of the capital. 'The capital of the kingdom of Anterior Chū-shih is the city of *Chiao-ho* 交河. The waters of the river there divide and flow round the city walls; hence the name *Chiao-ho* ("interlacing river"). The city is distant from Ch'ang-an (the present Hsi-an-fu) 8150 *li*. The kingdom contains 700 families, comprising a population of 6,050 persons.

Anterior
Chū-shih
in Former
Han
Annals.

² Regarding the Kārēz cultivation of Turfān and its introduction, cf. the remarks of Prof. E. Huntington, based on careful observation, *Pulse of Asia*, pp. 310 sqq.

The total absence in Chinese historical notices relating to Turfān of any reference to so striking a feature as the use of Kārēzes may safely be considered clear evidence that this method of cultivation was not known there down to

T'ang times and even later. It is very difficult to believe that the detailed and exact description of the territory of Kao-ch'ang in the *T'ang shu*, which duly mentions the two annual crops and the cultivation of cotton there, could have passed over the Kārēz system if it had then existed.

[^{2a} On this geographically important point, cf. my remarks, *G. J.*, 1925, June, pp. 487 sqq.]