I may note here at the same time that, notwithstanding the force and persistence of the winds Winds and and the abundant supply of drift-sand close at hand, the ground around An-hsi, as far as I saw it, atmospheric conditions showed nowhere those most characteristic effects of wind-erosion, the Yardang trenches of the Lop at An-hsi. Desert, or that general lowering of the ground level so noticeable at old sites along the southern edge of the Taklamakan. The probable explanation is afforded by the gravel beds which underlie the riverine loess of the surface at no great depth, and further by the cover of vegetation, which is sufficient to protect the soft surface soil in most places. This vegetation itself, which prevents or retards deflation such as has long overtaken the desert ground west of the Tun-huang oasis, is, no doubt, kept alive mainly by subsoil water and occasional flooding from the Su-lo Ho. But from what personal experience and archaeological indications showed me, I have reasons to believe also that the atmospheric conditions about An-hsi are less arid than in the Tun-huang region, and that eastward from the latter a slight but steady increase in local precipitation may be looked for in the Su-lo Ho valley and in the tracts beyond it towards Su-chou.9

Having stated such direct observations as my stay at An-hsi allowed me to gather regarding Historical the traceable remains of the tract and the geographical facts bearing upon its past, I may now turn topography to the examination of a record which concerns the historical topography of old Kua-chou. It is the only one accessible to me, and may claim particular interest because it emanates from Hsüan-tsang and is very closely connected with a very memorable event of his life. I mean his adventurous start from the borders of the Empire for the Western regions. The Life of the great pilgrim tells us how, with the avowed object of 'reaching the land of the Brahmans in search of the Law', he left Liang-chou, apparently towards the end of A.D. 629, and arrived at Kua-chou.10 On inquiring about the Western routes the Master of Law was told: 'At rather more than fifty li from here, marching to the north, one comes to the river Hu-lu 紅瓜崎, of which the lower course is wide and the upper one very contracted. It is full of eddies and rapids, and is too deep to be forded. On this river the Yü-mên barrier has been established, by which one is obliged to pass and which is the key (literally 'throat') of the Western regions. To the north-west, beyond this barrier, there are five signaltowers where the guards entrusted with keeping the look-out reside. They are a hundred li apart one from the other. In the space which separates them there is neither water nor herbage. Beyond these five towers there lie the desert of Mo-ho-yen and the frontiers of the kingdom of I-wu.' 11

I must refer to Julien's version for the touching account given in the Life, which tells us how Hsuanthe eager pilgrim, encouraged by auspicious dreams and omens—and with the connivance of the tsang's start from local governor who for piety's sake agrees to close an eye, more Sinico-prepares to evade the Kua-chou. official prohibition against his crossing the border and to venture into the dread desert beyond. What concerns us here is the location of the Yü-mên barrier as it existed at the time, and any other indications that Hsüan-tsang's story may furnish as to the old topography of Kua-chou and the route leading from it to Hāmi. After having secured from an aged 'barbarian' a horse recommended for having done the journey to I-wu fifteen times to and fro, we are told that he started with a sole companion, another 'barbarian', at night.12

9 Cf. Desert Cathay, ii. pp. 239 sq.

10 I am reproducing the passage of the Life from Julien's translation (Julien, Vie de Hiouen-Thsang, p. 17) in accordance with certain corrections which Dr. L. Giles has kindly indicated. See also Beal, Life of Hiven Tsiang, p. 11.

¹¹ Julien transcribes the name I-gou, without showing the Chinese characters in the Index of Mémoires, ii. Beal reproduces the name in the same form. The name in the text is I-wu 伊吾, the designation of Hāmi in T'ang times.

For I-wu and Mo-ho-yen (the form as corrected by Julien, Mémoires, ii. p. 516, instead of Mo-kia-yen which Beal repeats), see below, pp. 1144, 1149.

12 Cf. Julien, Vie, p. 21. The mention of this experienced equine wayfarer seems to me to give a distinct touch of reality to the story as recorded in the Life. Together with other points which I shall have occasion to mention when I discuss below, pp. 1143 sqq., the details told of Hsüan-tsang's adventurous march through the desert, it creates a presump-

of Kua-chou.