carried off any fragments of the rampart that had previously survived on the tops of the erosion terraces. Puzzling as the result seemed at the time, I could not doubt the correctness of this explanation after the badly breached eastern walls of the ruined Chinese towns about An-hsi, surveyed half a year later and to be described below,6 had revealed to me the intermediate stages of the process.

Remnants of east wall discovered.

My visit to the site in February, 1914, has enabled me to verify the above explanation by the discovery of two small surviving remnants of the east-north-east wall which had previously escaped my notice, and thereby also to determine the exact shape and extent of the ancient circumvallation. Curiously enough, the photograph reproduced in Fig. 93, which was taken from the base of the ruined Stūpa above L.A. I on the first day of my stay in December, 1906, shows the position of these fragments of the wall which subsequently, when looking about on the lower level of the eroded ground, I had failed to recognize.6a The northern segment, seen in Fig. 93 near the centre of the view, is marked by a thick layer of tamarisk branches, about ten feet wide, covering the top of a terrace for about eighty feet. These tamarisk fascines of the wall foundation—for such they were in fact—are carefully laid, here as elsewhere, at right angles across the direction of the wall. The top of the terrace, which this thick layer of tamarisk brushwood has helped to preserve from erosion, now rises fully sixteen feet above the eroded ground eastwards. To the north, the wall once continuing this segment has completely disappeared through wind-erosion, as is shown by the photograph in Fig. 92 extending the panoramic view to the east of the Stūpa. But, about 220 feet further south, there survives another segment of this wall face in the shape of a smaller terrace bearing on its top a similar layer of tamarisk fascines about twenty-four feet long. This terrace, too, which rises quite close to what must have been the south-east corner of the walled enclosure, is visible in Fig. 93. The two segments were found by careful observation with prismatic compass to lie in the direction N. 330° W. to S. 150° E., and thus on a line almost exactly at right angles to the previously determined south and north walls. A mass of heavy timber débris, lying on completely eroded ground about eighty feet to the north of the first segment and just on the above line, may well represent the last remains of the east gate of the ancient station. The determination of the eastern wall face made it possible in 1914 to complete a survey of the

Square shape of circumvallation.

whole circumvallation. It was thus proved that the walled enclosure formed an almost exact square of about 1,020 feet inside. This square shape is the typical one found in most Chinese walled towns or ch'êng to the present day, as subsequent observation showed me in the case of the many fortified towns and villages, both old and modern, which I passed on my journey through north-western Kan-su. That this shape is of early origin is certain; but how far back its orthodox use dates I must leave to Sinologue antiquarians to determine. The correct orientation of the walls towards the cardinal points of the compass which I ordinarily observed in these ch'eng has, no doubt, its reason in Chinese traditional lore, and this gives special significance to the different position adopted at L.A. for the walls of the old Chinese station. We have seen that in the latter the clearly traceable 'south' and 'north' walls followed exactly the direction of the prevailing east-north-east wind, to which fact they owe their relative preservation, and that the other two wall faces lay straight across this wind direction. It is impossible not to recognize here an intentional adaptation of the traditional scheme to the need of protection from the prevailing wind, which for long geological ages before the dawn of historical times must have been the same determinant factor in the atmospheric conditions of the Lop region that it now is. We have already observed the same special orientation in the case of individual structures on the site, and cannot possibly doubt that the

Orientation of walls adapted to wind direction.

reason determining it was identical.

⁶ See below, chap. xxvi. sec. ii.

^{6a} For a similar experience, cf. below, chap. xvII. sec. i.