

By February 1st I started myself into the desert north-eastward. My party numbered thirty-five men, having to include an adequate posse of labourers for excavations. What with big loads of ice sufficient to assure minimum allowances of water for at least one month, with food supplies of one month for all and of an additional month for my own people, and with the indispensable outfit, the thirty camels I had managed to secure barely sufficed for the transport. After five marches from the dying Tārīm my first goal was reached in a series of small ancient sites, to the west of the route followed in 1906. They were found to extend along a well-marked dry river course, clearly proved by our survey to be a southern branch of the ancient *Kuruk-daryā* ('the Dry River') which had once carried water to the area of ancient Lou-lan.<sup>20</sup> Abundant relics recovered at these sites showed that they had been abandoned about the beginning of the fourth century A. D., and the antiquarian evidence thus obtained makes it possible to date a variety of physical features which throw fresh light on the hydrography and occupation of this region during early historical times and those immediately preceding them.<sup>21</sup>

Observations and finds made on our subsequent marches to the Lou-lan site proved to have a similarly important bearing on the so-called 'Lop-nōr problem', the discussion of which has long been carried on among geographers without an adequate basis of surveys. In the wind-eroded clay desert crossed there we met a succession of ancient river-beds all lined by rows of dead *toghrak* (wild poplar) trees such as are invariably found along actual river courses in this region. These beds were clearly recognizable by their direction as having branched off from the 'Dry River' skirting the foot of the Kuruk-tāgh; and it was easy to trace their connection with others similarly marked, shown on our plane-table traverses to and from the Lou-lan site in 1906 further to the east or west.

A careful comparison of all the data thus recorded and of those ascertained a year later by Afrāz-gul's plucky survey of the western edge of the great salt-encrusted basin has convinced me that it was a considerable delta, not a large terminal lake, which had existed here in the area south of the Lou-lan remains during historical times. The extent of this delta to the south and south-west can plainly be traced from our several surveys as now shown on the map.<sup>22</sup>

After my arrival by February 10th at the ruined site (*L. A.*) which marks the ancient Chinese station of Lou-lan, I sent reconnaissances into the unknown desert of wind-eroded clay and low drift-sand to the east and north-east, at the same time keeping my diggers at work on unexplored remains at the site. These reconnaissances in which Afrāz-gul Khān displayed remarkable zeal and intelligence, were attended with important results. They revealed a series of ruins to the north-east stretching along what I conjectured to have been the line of the earliest Chinese route leading into the Tārīm basin from Tun-huang and the extreme west of China proper, as first opened by the Han Emperor Wu-ti's operations in the last quarter of the second century B. C.<sup>23</sup> The discoveries made there included a fortified *castrum* which had served as a *point d'appui* for Chinese missions and troops where they first reached Lou-lan territory after crossing the salt-encrusted bed of the dried-up Lop sea. They furnished me with a safe starting-point for the difficult task of tracing the line of that famous ancient route eastwards.

<sup>20</sup> See Sheet No. 29. C, D. 4, for the sites marked L. K., L. L., L. M.

<sup>21</sup> For some account of these sites and the 'finds' made there, see my paper *Explorations in the Lop Desert*, *Geographical Review*, New York, 1920, ix. pp. 11 sqq.

<sup>22</sup> See Sheet No. 29. C, D. 4. The direction of the branching ancient river beds, generally from N. W. to S. E. south of 40° 28' latitude, and from W. to E. further north, is shown on the map by the

bearing of the rows of dead tree symbols as carefully entered on the plane-table at the time.

<sup>23</sup> For the discoveries made at these ruins cf. *G. J.*, xlviii. pp. 123 sqq.; *Geographical Review*, ix. pp. 19 sqq. Regarding the Chinese historical records of the ancient route which served for Chinese trade and military expansion into Central Asia during the first centuries before and after Christ, cf. *Serindia*, ii. pp. 553 sqq.