

“On Explorations in Central Asia, 1906–1908,” in the *Geographical Journal* (vol. xxxiv. p. 26, 1909), says that at the time of his visit the new lakes found by Sven Hedin in the Lob Desert had almost disappeared. Sven Hedin, in the discussion on the same paper (p. 270), observes that whether this denotes that the lakes are in a period of shifting, or that in general the volume of water carried down by the Tarim has been diminished in recent years, can only be determined by comparison of the maps and measurements of the river.

From all this it may be fairly inferred that, owing to the uniform level of the region, the sluggish flow of the Tarim, its tending to divide and reunite, conjoined with the violence of the winds (mostly from the east and north-east) and the rapid and dense growth of the reed-beds in the shallow marshes, the drainage waters of the Tarim basin gather in greater volume now in one depression and now in another. This view derives support from the extreme shallowness of the lakes in both Sven Hedin's northern Lob-Nor and Prejevalsky's southern Lob-Nor.

Ellsworth Huntington sums up the history of Lob Nor thus¹:—
 “We have first a comparatively large lake, said to measure 75 miles each way, in spite of the fact that the populous towns of Lulan and of more remote regions diverted much more water than now. Next, during the early centuries of the Christian era, there is a decrease in the recorded size of the lake, even though the towns of Lulan were being abandoned and their water was being set free to reinforce the lake. Then, in the Middle Ages, there was an expansion of the lake, which cannot have been due to diminished use of the rivers for irrigation, for the population of the Lop-Nor basin at that time was greater than now, though not equal to that of the flourishing Buddhist times, a thousand or more years earlier. Finally, during the last few hundred years there has been a decrease both in the size of the lake and in the population about it.” This theory, Huntington says, seems to fit the facts, and all the facts are explicable on the theory of a secular change of climate from moister to drier conditions, with a rapid intensification in the early part of the Christian era, and a slight reversal in the Middle Ages. Hedin,² on the other hand, who utterly scouts the idea of any change of climate during historic times, recognises that during certain periods Lob-Nor has been distinctly larger than it is, even during times of unusually high water, at the present day. He explains this on the assumption that during these periods the number of marginal lakes and swamps on the Tarim River was less than now. The objection offered to this is that, when a river has reached the mature stage of the Tarim, the average

¹ *Bull. Amer. Geogr. Soc.*, vol. xxxix. p. 146, 1907.

² Cited by Huntington, *op. cit.*, p. 142.