

was proved to be of relatively recent date; and before these lakes originated the Kara-koschun was therefore one-fourth bigger than it is now. If now the river maintains its present course, to even a moderate extent, unaltered, and thus enjoys an opportunity of going on building up its containing ramparts undisturbed, its surface will eventually rise higher and higher above the desert depressions, and these again will in their turn make bigger and bigger demands upon the Tarim for water to fill their basins. If however the Tarim, both in this part of its course and lower down as well, moves farther to the east — and this is what will very likely happen — then these marginal lakes will cease to exist, and the Kara-koschun will consequently expand and enlarge its area.

Hence the oscillations in the lake are entirely dependent upon chance hydrographical changes; but it would be a grave mistake to attempt to harmonise these periodical variations either with the Brückner periods or with any other secular climatic changes in Central Asia. The diminution of the Kara-koschun is simply and solely the reciprocal effect of the origination of the marginal lakes higher up the river.

But if these marginal lakes diminish the Kara-koschun to the extent of one-fourth, and the Kara-köl lakes likewise exercise a considerable drain upon the river, it might be expected that the Kara-koschun would have undergone a more appreciable and more extensive diminution than what actually has been the case. But as against this, there is the probability that other marginal lakes and lagoons, which were in existence at an earlier period, have in process of time become filled up and been abandoned. This has happened, for instance, in the case of the Kara-buran, which, according to Prschevalskij's map of 1877, had an area equal to one-third that of the Kara-koschun, but since that time it has shrunk to quite a small temporary sheet of water, which disappears entirely in the summer. The extinction of this lake has had a diametrically opposite effect to that produced by the origination of the marginal lakes; this and the great area to which the Kara-buran extended less than 30 years ago have contributed to make the drain of the Kara-koschun less noticeable than it otherwise would be. In the case of the oscillations therefore that owe their occurrence to more local causes the cooperating factors to some extent counterbalance one another. At the present time however the northern marginal lakes have such a decided preponderance, that the Kara-koschun has as an actual fact during the last decennia shrunk very considerably.

These arguments and conclusions prove those, who believe that the Kara-koschun is a last lingering remnant of a gigantic lake which once filled the triangle between the Kuruk-tagh, the lower Tarim, and the Astin-tagh as late as the 3rd and 4th centuries, to be absolutely wrong, for the view they advocate exhibits a defective knowledge of the hydrographical and hypsometrical relations in the Lop country. Radical changes and alterations of the kind they point to transcend entirely the historical reckoning and belong to the domain of geological computation.

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I will now proceed to discuss the theory which seems to me to explain the causes of the migrations of the lake of Lop-nor. From the very nature of the case the causes in question, excepting only the effects due to fluvial sediment and the