

that this figure has been selected from a consideration of the existing volume of the lake, and that only thirty years ago its volume was considerably greater. In the second place, we do not know how long the Kara-buran acted as a clearing-basin, and consequently we are ignorant how long it served as a check upon the filling up. Finally we have assumed on good grounds that the Kara-koschun, in its present form and in its present situation, dates from about the year 1740, and that previous to that date the river flowed through the bed of the Tokus-tarim, and not through the Kara-buran. But the value of all these theoretical calculations is to a very great extent outweighed by the observations I made with my own eyes in 1901, namely that the lake is no longer willing to remain in its present basin, but is travelling towards the north. This fact proves, with a force that renders all theory silent, that it is an utterly erroneous view to take, to suppose that the three factors I have named require a period of a couple of hundred years in which to fill up the lake-basin and expel the water from it.

And this leads us quite naturally to the question, Why is it, that the water does not remain in the basin of the Kara-koschun, seeing that its volume amounts to 2000 million cubic meters? The answer is perfectly self-evident: there are relatively deeper depressions to the north. Why did the lake not select them for its bed always, instead of, some 160 years ago or so, making its way into its existing situation? Simply because 160 years ago the present »basin» of the Kara-koschun was as a matter of fact deeper than the region to the north of it, but at the present time the situations are reversed. How then are we to explain the change that has taken place in the relative altitudes of these two quite adjacent regions? The answer to this question contains the key to the solution of the Lop-nor problem, and at the same time points out the cause of the lake's migration.

I went all round the northern and deeper depression in 1901, and found very little drift-sand there. In striking contrast to the region immediately adjacent on the east, the ground consisted of clay, furrowed by wind-groovings from north-east to south-west, and separated from each other by jardang-ridges. If we assume that, during the last 160 years, the Kara-koschun has — apart from certain changes of area — maintained the form shown by Prschevalskij, then during the whole of the period in question the clay desert to the north of it, being perfectly dry and only in part covered with sand, has been exposed to the erosive action of the wind, a very thin layer being shaved off its surface every year. And even though the layer, thus removed by the agency of corrasion, only amounts to 1 to 2 cm. in depth in the course of the year, the total result at the end of 160 years is sufficiently perceptible to make the employment of the term depression, when applied to the lowered surface, not inappropriate. In proportion as the surface has been lowered, the basin of the Kara-koschun has to a corresponding extent been gradually filled up, so that the rate at which the difference of elevation is produced is thus duplicated. Finally, it follows of necessity, that the water will leave the southern depression and seek the northern. How far the latter depression extends at the present time towards the north we do not know, but it seems very probable that it reaches all the way to the depression of the ancient Lop-nor. It is therefore probable that the newly formed desert lakes which I travelled round form a connecting link, in the shape of a broad