

way the two dominant directions make a very distinct angle, the apex of which is precisely at the spot where the river empties itself into the Avullu-köl. At that time my knowledge of the country and of the relief of the deserts in the vicinity was much too limited, and I now find that the theory which I then put forward, partly with the view of explaining the origin of the angle itself, and partly for the purpose of establishing a connection between the old Lop-nor and this eastern chain of lakes, was incorrect, or at any rate can only be accepted as partially correct. True, it agreed with the observations I made later, that the Ilek, in virtue of its current and its power of undermining its banks, may preserve its position for several years, while the chain of lakes will be compelled by the advancing drift-sand to shift their positions to the west, or at all events their eastern shores must advance in that direction. On the other hand it was quite an error to look upon the Kara-köl and its neighbour lakes as a last lingering remnant of the Lop-nor, which have been pushed thus far west in consequence of the sand-storms being reduced to a minimum. For, as I have proved above, it was the Kuruk-darja which emptied itself into the lake of Lop-nor. I was also led to the conclusion, that the desert is gaining ground at the cost of the Kara-köl lakes, by the following facts, — the sand-dunes reach their greatest height close to their shores; several of the sand-dunes form peninsulas, projecting like capes and tongues out into the lake towards the west-south-west; immediately east of the lakes there are numerous pools and lagoons, which, though now cut off from the lakes, were formerly integral parts of the same; the forest exhibits various stages of maturity, proving that it has travelled westwards at the same rate as the lakes have done. On the other hand these facts failed to suggest the extent to which the lakes in question formerly stretched to the east, nor indeed can a definite answer be given to this question until after the desert between the Kara-köl lakes and the old Lop-nor has been thoroughly surveyed.

I have just said, that the theory I suggested in 1896 can only be in part correct. It is to a certain extent corroborated by the existence of the trench running from west-south-west to east-north-east, and containing all the great depths — Markat, Ilek, Tajek-köl, and Lop-nor. In one of the sections belonging to the hypsometrical resumé at the end of this volume, I have inserted a depression which probably exists between the Tajek-köl and the Lop-nor. But how far the Kara-köl lakes really were connected with the Lop-nor, and especially with that part of it which we crossed in making our survey, it is at the present time impossible to say. As however I have supposed, that west and west-south-west of stations Nos. 81, 82 and 83 in our measured line there exists an even more important depression, and seeing that the circumstances to which I have alluded as existing on the east side of the lakes Avullu-köl, Kara-köl, Tajek-köl, and Arka-köl prove that this chain of lakes formerly extended farther to the east, there is no real objection to the assumption, that, at some distant epoch in the past, the whole of this region formed a single connected basin filled with water. Nevertheless if we adopt this suggestion, it brings us face to face with certain difficulties in another direction. For if the whole of the basin in question were filled with water, it would have continued to contain water, or at any rate a great part of it would still contain water, even after the Kuruk-darja dried up; the only difference would have been,