

vancing ends of the dunes would be washed away, and the material of which they are composed would be dispersed by the movement of the waves and currents, and by the beat of the surf. We have another example of this species of shore-line, formed by the unequal advance of encroaching dunes, on the east side of the Avullu-Tajek-Arka-köl. The fact of the sand of the Ak-bel-kum being highest on the shore of the lake is in agreement with its orientation, for it ought to rise in height towards the centre of the basin, as it does in the Kum-tagh in the basin of the Tarim, and in the belt of sand that lies beside the Basch-kum-köl.

If these dunes derived from the lake the materials of which they are built up, we should expect to find dunes also on the northern and western shores, where the lake is shallow, shallow water being an indispensable condition for the formation of coastal and lacustrine dunes. But on those two sides of the Baghrasch-köl the belt of reeds is broader, and effectively prevents the formation of dunes.

There is however yet another circumstance that lends support to the view, that the Ak-bel-kum would exist in the position it now occupies even though there were no Baghrasch-köl, namely the fact, that in general dunes are much rarer on rising coasts (a negative coastal displacement) than on subsiding coasts. In respect of this Sokolow says: »Somit liegen die meisten Stranddünen an unterwaschenen und infolge davon zurücktretenden Küsten, welche oft zugleich auch noch im Sinken begriffen sind. Sie machen über 90% sämtlicher europäischen Stranddünen aus. Unvergleichlich geringer ist die Entwicklung der Dünen an solchen Küsten, deren Aufsteigen als erwiesen angesehen werden kann.»\*

The relations indicated in the opening sentence of this passage are those which appear to obtain on the shores of the Baghrasch-köl, that is to say, the water-surface, as compared with the shores, is sinking. Of this we have direct evidence in the sharply outlined terrace that Roborovskij mentions as running parallel with the eastern shore-line, but at a great distance from it. In this process the filling up of the lake-basin with drift-sand, dust, and sediment brought down by the Chaidugol plays only an insignificant part; for the deposits of this stream stretch out into the lake in the form of a sharply pointed peninsula. Theoretically the only consequence of this deposition of sediment, and sediment really is deposited, ought to be an increase in the volume of the Kontsche-darja, although the amount of the augmentation is of course excessively small. One indirect effect produced by it should be to enhance the erosive power of the Kontsche-darja as a consequence of its increased volume. And it is precisely this factor of the river's continued erosion — its uninterrupted excavation of the transverse valley between the Tien-schan and the Kuruk-tagh — which continually diminishes and reduces the actual volume of the lake-basin. The process of sedimentation goes on uninterruptedly, and is tending eventually to the total disappearance of the lake. In proportion as the water-area diminishes, the amount of evaporation will decrease, and concurrently with this an increasing quantity of water will find its way into the Kontsche-darja, and this will also enhance proportionally its erosive power. At Kalka, in the transverse valley, there are old riverine terraces at a pretty good height above the level of

\* N. A. Sokolow, *Die Dünen*, p. 45.