

moulded by the subsequent activity of the wind, and all traces of them are now lost. The only locality in which unambiguous dunes of an older epoch have been preserved is the region of Lop-nor, and the only criterion by which we are enabled to distinguish these dunes from the more recent barkhan-formations is the characteristic orientation which here distinguishes the chains of dunes; nothing else will account for the directions in which they lie, except the arrangement of the shores around the former watery expanse of the Lop-nor.»*

Before proceeding to examine and criticise the above passage, I have yet one other Russian author to quote. South of the Baghrasch-köl stretches a small detached sandy desert which Roborovskij calls the Ak-bel-kum. This he describes from the most northerly point of the southern shore of the lake: »The region before us was not very encouraging. Sandy barkhans came down *en échelon* to the shoreline, and even touched the belt of reeds beside the lake; they were still higher than those we met with in the preceding day's march. One of these, the one nearest our night bivouac, reached, according to aneroid measurement, an altitude of 360 feet above the surface of the lake. It took me more than an hour to climb to the top, and I descended, or rather slid down in a sitting posture, in 40 minutes. Even in the lake itself, here and there close to the shore, there were huge barkhans, forming lofty islands, rising to sharp crests, and girdled about with golden reeds. Some of these were already connected with the shore by means of narrow tongues of sand. Others bordered bays in the lake, and occasionally cut off small isolated saline lagoons. Far off in the south were gigantic sandy mountains, rising to an altitude of at least 500 feet above the surface of the lake.»**

There is also a small patch of drift-sand on the eastern shore of the lake. With regard to it Roborovskij says, »The connected belt of sand which accompanies the southern shore of the lake terminates at its south-east corner in detached barkhans, scattered over the saline soil. But there is another belt of sandy barkhans on the east shore of the lake, about 20 versts long and from 6 to 8 versts broad, bearing the name of Schamal-gansin-kum.*** East of that stretches the long salt tract of Tus, bordered by a high terrace, which in all probability was once the shore of the lake.»†

Both these belts of desert differ in several respects from the Takla-makan. As compared with the immense drift-sand area of East Turkestan, they are but infinitesimal in area, and both are very sharply defined. In this respect they belong to the same category as the Kum-tagh, south of Pitschan, and as the expanse of sand that stretches south of the Basch-kum-köl in northern Tibet, though the latter occupies only a small portion of a large basin. Roborovskij's account fails however to give us any clear information about various important matters connected with the sand's architecture, especially about those which might guide us in attempting to explain the causes which have led to the presence of the Ak-bel-kum on the south and east of the lake, and this circumstance more particularly requires explanation see-

* *Geologitscheskija Issledovanija v Vostotschnom Turkestane*, pp. 91 ff.

** *Trudij Tibetskoj Ekspeditsij, 1889—90*, III. p. 88.

*** On the map he calls it Schamal-tschansin-kum.

† *Op. cit.*, p. 89.